

PACIFIC ISLANDS FISHERIES SCIENCE CENTER



Fishery Statistics of the Western Pacific

Volume 21

Territory of American Samoa (2004)
Commonwealth of the Northern Mariana Islands (2004)
Territory of Guam (2004)
State of Hawaii (2004)

Compiled by

David C. Hamm, Nathan T. S. Chan, and Craig J. Graham

June 2006



Administrative Report H-06-02

About this report

Pacific Islands Fisheries Science Center Administrative Reports are issued to promptly disseminate scientific and technical information to marine resource managers, scientists, and the general public. Their contents cover a range of topics, including biological and economic research, stock assessment, trends in fisheries, and other subjects. Administrative Reports typically have not been reviewed outside the Center. As such, they are considered informal publications. The material presented in Administrative Reports may later be published in the formal scientific literature after more rigorous verification, editing, and peer review.

Other publications are free to cite Administrative Reports as they wish provided the informal nature of the contents is clearly indicated and proper credit is given to the author(s).

Administrative Reports may be cited as follows:

Author. Date. Title. Pacific Islands Fish. Sci. Cent., Natl. Mar. Fish. Serv.,
NOAA, Honolulu, HI 96822-2396. Pacific Islands Fish. Sci. Cent.
Admin. Rep. H-XX-YY, xx p.

For further information direct inquiries to

Chief, Scientific Information Services
Pacific Islands Fisheries Science Center
National Marine Fisheries Service
National Oceanic and Atmospheric Administration
U.S. Department of Commerce
2570 Dole Street
Honolulu, Hawaii 96822-2396

Phone: 808-983-5386

Fax: 808-983-2902

NMFS Honolulu Library



00000000005238

Pacific Islands Fisheries Science Center
Administrative Report H-06-02

LIBRARY

Pacific Islands Fisheries Science Center
National Marine Fisheries Service
2570 Dole St.
Honolulu, HI 96822-2396

Fishery Statistics of the Western Pacific

Volume 21

Territory of American Samoa (2004)
Commonwealth of the Northern Mariana Islands (2004)
Territory of Guam (2004)
State of Hawaii (2004)

Compiled By

David C. Hamm,¹ Nathan T. S. Chan,² and Craig J. Graham²

¹National Marine Fisheries Service
Pacific Islands Fisheries Science Center
2570 Dole Street, Honolulu, Hawaii 96822-2396

²Joint Institute for Marine and Atmospheric Research
University of Hawaii, Manoa
2570 Dole Street, Honolulu, Hawaii 96822-2396

June 2006

LIBRARY
Pacific Islands Fisheries Science Center
National Marine Fisheries Service
2570 Dole St
Honolulu, HI 96822-2386

CONTENTS

	Page
Introduction	1
Progress	2
Precautions	2
Contents	3
Definitions	3
Graphics	4
 Section A: American Samoa	
Introduction	A.1
Special Note on Data Revisions	A.2
Data Collecting System	A.2
Data Processing System	A.6
Data Quality and Cross Validation:	
American Samoa Longline Example	A.8
Data Reporting System	A.9
Interpretation of Statistics	A.15
Tables	A.16
Figures	A.32
 Section B: Commonwealth of the Northern Mariana Islands	
Introduction	B.1
Data Collecting System	B.2
Data Processing System	B.3
Data Reporting System	B.3
Tables	B.6
Figures	B.19
 Section C: Guam	
Introduction	C.1
Commercial Landings Data Collecting System	C.1
Commercial Landings Data Processing System	C.2
Commercial Landings Data Reporting System	C.3
Interpretation of Statistics	C.5
Tables	C.6
Figures	C.19
 Section D: State of Hawaii	
Introduction	D.1
Data Collecting System	D.2
Data Processing System	D.3
Data Reporting System	D.3
Tables	D.8
Figures	D.34

PREFACE

Over the years, the demand for data and information concerning marine fisheries has greatly increased. To help meet these increased needs in the central and western Pacific areas, the National Marine Fisheries Service's (NMFS) Southwest Fisheries Science Center (SWFSC) initiated the Western Pacific Fishery Information Network (WPacFIN) to assist Pacific island fisheries agencies in upgrading their data collecting, processing, and reporting capabilities.

In 1982, these agencies formed a Fisheries Data Coordinating Committee (FDCC) and a FDCC Technical Subcommittee to help guide, coordinate, and monitor all of their fisheries data-related activities. Significant progress has been made by all participating agencies, particularly in the areas of upgrading data collecting and processing systems.

In a major step to improve and coordinate the data reporting and distribution systems of the agencies, in May 1985 the FDCC agreed to produce a combined document reporting each island's major fisheries statistics. Production of the document would be the responsibility of the FDCC Technical Subcommittee and would be coordinated by the WPacFIN Program Manager. Each agency would supply the data required to produce the tables and graphs for its respective chapter, and central WPacFIN staff would produce and distribute the document as part of the Administrative Report Series.

In April 2003, NMFS created a new Pacific Islands Region composed of the Pacific Islands Fisheries Science Center (PIFSC, formerly SWFSC's Honolulu Laboratory) and the Pacific Islands Regional Office (PIRO, formerly Southwest Regional Office's Pacific Islands Area Office). As such, this report is now affiliated with PIFSC rather than SWFSC.

This is the 21st volume in the series, "Fishery Statistics of the Western Pacific," and it contains year 2004 summaries of commercial landings for American Samoa, the Commonwealth of the Northern Mariana Islands, Guam, and Hawaii. As with previous volumes, it is divided into sections, one each for the major island areas.

INTRODUCTION

This report is compiled by fisheries agencies participating in the Western Pacific Fishery Information Network (WPacFIN, formerly referenced as WPACFIN), a collaboration among fisheries agencies in Hawaii, Guam, the Commonwealth of the Northern Mariana Islands (CNMI), and American Samoa. WPacFIN's goal is to improve the availability and dissemination of fisheries information. Participating groups include

American Samoa	Department of Marine and Wildlife Resources (DMWR)
	Pacific Islands Regional Office (PIRO) Fisheries Monitoring Field Office, American Samoa
Commonwealth of the Northern Mariana Islands (CNMI)	Division of Fish and Wildlife (DFW)
Guam	Division of Aquatic and Wildlife Resources (DAWR)
	Bureau of Statistics and Plans (BSAP; formerly Department of Commerce)
Hawaii	Hawaii Division of Aquatic Resources (HDAR)
	Pacific Islands Fisheries Science Center (PIFSC)
	Pacific Islands Regional Office (PIRO)
	Western Pacific Regional Fishery Management Council

WPacFIN and these groups collect, computerize, edit, and process data from the islands. WPacFIN staff at the Pacific Islands Fisheries Science Center then use these data to create the summaries and graphs found in this document.

Data from DMWR, DAWR, and DFW are supplied on portable computer media in established WPacFIN database formats. Data for Hawaii are provided by HDAR through an electronic telecommunications link. Once data from all agencies are put into the proper format on the central WPacFIN computer and appropriate edit, adjustment, and verification procedures are completed, summary tables and charts are produced using software developed by WPacFIN staff and commercially available software.

PROGRESS

In 1981 when WPacFIN began assisting agencies in improving their data collecting and processing systems, only the State of Hawaii had computerized processing. By mid-1982, fisheries offices in American Samoa, Guam, and the CNMI were using WPacFIN-supplied computers to process data. Since that time, these agencies have made significant improvements to their data collecting systems and have established sound, automated data processing systems. Most agencies can now provide preliminary fishery statistics to WPacFIN within 45 days of the date of collection.

In particular, the HDAR has significantly improved its procedures for editing, updating, and processing Hawaii's data; it has reduced the lag time in data processing from about 2.5 years to less than 3 months for most data. The biggest problems still facing HDAR in improving its data systems are reducing the delinquency of fishermen reporting and implementing a validation system to ensure that what gets reported by fishermen is accurate. A Dealer Reporting System has been implemented to augment the Fishermen's Reporting System and has helped address this issue, and efforts are continuing to develop and implement other improvements to the Hawaii fisheries monitoring programs.

PRECAUTIONS

Data collecting and processing systems vary greatly among Pacific island fisheries agencies. Although much standardization has taken place and is continuing, there remain unique aspects of each island's systems based on local needs and capabilities.

When using summaries contained in this report, especially if making comparisons, keep in mind the nature of the systems used to produce the data. For example, Hawaii's commercial landings data are based on mandatory monthly reporting by fish dealers and licensed commercial fishermen as well as NOAA Fisheries longline logbooks; CNMI and Guam's data are based on voluntary reporting of major fish buyers using government-provided "trip-ticket" invoices, adjusted to represent 100% coverage, and are referenced as "Estimated Commercial Landings;" American Samoa's data are based on a complex integration of data from a boat-based creel survey and data expansion system for a portion of the fisheries, mandatory logbooks and a size-frequency sampling program for the longline fishery, and a mandatory trip ticket invoice reporting system for local sales. Each system has advantages and disadvantages, and the user should be aware of them when comparing or interpreting data. In addition, WPacFIN staff and the island agencies are continually improving the data collecting and processing systems in each area. Because the improvements usually result in updates to the estimates of total and commercial landings, the data in this volume may not match exactly with data in previous volumes of this report series.

The user should also be aware that species assemblages vary among island groups, as do cultural preferences and principal fishing techniques and gear. Population size is of

particular importance when interpreting the relative value and importance of the fisheries. Explanations of data collecting and processing systems are provided in each island's section.

CONTENTS

This document is divided into sections by island group. Each section contains reports on the monthly and annual landings by species and species groups for the commercial fleet.

DEFINITIONS

In addition to the description of the systems and the monthly and annual reports, each section contains graphs of some of the summary fishery statistics of particular interest or importance to participating WPacFIN agencies. To graphically present the data, several categories have been defined for each island's fisheries. Because of differences in reporting systems and capabilities among the islands, species contained within each category may vary, but all categories are documented in each island's section. Overlap exists among some of the categories used for different graphs.

Note: Many of the species included in this report have been recategorized over the years. For example, the Magnuson Fishery Conservation and Management Act of 1976 was amended in 1992 to include tunas in the Pelagic Management Unit Species (PMUS) category. However, this FSWP volume will maintain the original species categorizations from previous volumes for comparative purposes. As such, tunas are kept in a separate category.

Categories used in the graphs include:

1. Fisheries Categories – These are combinations of species of similar ecological types, specifically pelagic, bottomfish, reef fish, and “other.” “Other” includes groups that generally traverse these categories, such as certain sharks and jacks, or are not typically included in these groups, such as mullet and milkfish.
2. Pelagic Management Unit Species (PMUS) – The Magnuson Fishery Conservation and Management Act of 1976 was amended in 1992 to place tunas under U.S. jurisdiction for management. The Fishery Management Plan for Pacific Pelagic Species was amended to reflect this change. However, this report series will continue to treat tunas as a separate category, and the PMUS category in this document includes only billfishes, wahoo, mahimahi, and oceanic sharks.
3. Bottom Fish Management Unit Species (BMUS) – Defined as the species of initial importance in the Fishery Management Plan for bottomfish and seamount fisheries, including the major deepwater snapper, grouper, emperor, and certain jacks.

4. Tunas – All the tuna species excluding wahoo. Historically this had been predominantly skipjack and yellowfin tunas in all areas, but with the growth of longline fisheries in Hawaii and American Samoa, bigeye and albacore tunas have become much more important or even predominant.
5. Other Tunas – The definition varies among the islands depending on the importance of each tuna species in the total landings. For Guam and the CNMI it remains the same and includes all tunas as defined above except skipjack and yellowfin tunas. In Hawaii and Samoa it also excludes bigeye and albacore tuna, and it includes only tuna with relatively minor landings.
6. Billfish – Combination of all marlin, sailfish, spearfish, and swordfish species.

GRAPHICS

Four types of graphs are provided with each island's data. Type I graphs present summary charts of the major species and species groups for the year being covered. Type II graphs are seasonality plots for the major species or species groups, showing the average weight landed during each month for all years combined. Type III graphs are time series plots of annual summary statistics to help visualize the variability among years. Type IV graphs are plots of monthly landings of some of the major commercially important species and document monthly fluctuations in landings of these species over the entire time series.

To access the most up-to-date data and charts, please visit the WPacFIN Website at <http://www.pifsc.noaa.gov/wpacfin>.

AMERICAN SAMOA 2004 FISHERY STATISTICS

Compiled by

American Samoa

Department of Marine and Wildlife Resources

and the

Western Pacific Fishery Information Network

June 2006

CONTENTS

	Page
Introduction	A.1
Special Note on Data Revisions	A.2
Data Collecting System	A.2
Data Processing System	A.6
Data Quality and Cross Validation: American Samoa Longline Example	A.8
Data Reporting System	A.9
Interpretation of Statistics	A.15
Tables	A.16
Figures	A.32

LIST OF AMERICAN SAMOA SUMMARY TABLES

Table	Title	Page
A-1	American Samoa Annual 2004 Estimated Commercial Landings	A.16
A-2	American Samoa January 2004 Estimated Commercial Landings	A.18
A-3	American Samoa February 2004 Estimated Commercial Landings	A.19
A-4	American Samoa March 2004 Estimated Commercial Landings	A.20
A-5	American Samoa April 2004 Estimated Commercial Landings	A.22
A-6	American Samoa May 2004 Estimated Commercial Landings	A.23
A-7	American Samoa June 2004 Estimated Commercial Landings	A.24
A-8	American Samoa July 2004 Estimated Commercial Landings	A.25
A-9	American Samoa August 2004 Estimated Commercial Landings	A.26
A-10	American Samoa September 2004 Estimated Commercial Landings	A.27
A-11	American Samoa October 2004 Estimated Commercial Landings	A.28
A-12	American Samoa November 2004 Estimated Commercial Landings	A.30
A-13	American Samoa December 2004 Estimated Commercial Landings	A.31

LIST OF AMERICAN SAMOA FIGURES

Figure	Title	Page
A-1-1	2004 Monthly Estimated Commercial Landings for Pelagic, Bottom, Reef, and Other Fish	A.32
A-1-2	2004 Monthly Estimated Commercial Landings of Tunas, PMUS, and BMUS	A.32
A-1-3	2004 Monthly Estimated Commercial Landings of Wahoo, Mahimahi, and Billfish	A.33
A-1-4	2004 Monthly Estimated Commercial Landings of Albacore and Yellowfin Tunas	A.33
A-1-5	2004 Monthly Estimated Commercial Landings of Skipjack, Bigeye, and Other Tunas	A.34
A-2-1	1982-2004 Average Monthly Estimated Commercial Landings of Tunas, PMUS, and BMUS	A.34
A-2-2	1982-2004 Average Monthly Estimated Commercial Landings of Wahoo, Mahimahi, and Billfish	A.35
A-2-3	1982-2004 Average Monthly Estimated Commercial Landings of Surgeonfish (Tangs), Bluelined Snapper, and Spiny Lobster	A.35
A-2-4	1982-2004 Average Monthly Estimated Commercial Landings of Albacore and Yellowfin Tunas	A.36
A-2-5	1982-2004 Average Monthly Estimated Commercial Landings of Skipjack, Bigeye, and Other Tunas	A.36
A-3-1	1982-2004 Annual Estimated Commercial Landings for Pelagic, Bottom, Reef, and Other Fish	A.37
A-3-2	1982-2004 Annual Estimated Commercial Landings (Pounds and Dollars)	A.37
A-3-3	1982-2004 Annual Estimated Commercial Landings for Tunas, PMUS, and BMUS Landings	A.38
A-3-4	1982-2004 Annual Estimated Commercial Landings for Wahoo, Mahimahi, and Billfish	A.38
A-3-5	1982-2004 Annual Estimated Commercial Landings for Albacore and Yellowfin Tunas	A.39
A-3-6	1982-2004 Annual Estimated Commercial Landings for Skipjack, Bigeye, and Other Tunas	A.39

LIST OF AMERICAN SAMOA FIGURES (cont)

Figure	Title	Page
A-4-1	1982-2004 Monthly Estimated Commercial Landings of Wahoo	A.40
A-4-2	1982-2004 Monthly Estimated Commercial Landings of Mahimahi	A.40
A-4-3	1982-2004 Monthly Estimated Commercial Landings of Blue Marlin	A.41
A-4-4	1982-2004 Monthly Estimated Commercial Landings of Albacore	A.41
A-4-5	1982-2004 Monthly Estimated Commercial Landings of Skipjack Tuna	A.42
A-4-6	1982-2004 Monthly Estimated Commercial Landings of Yellowfin Tuna	A.42
A-4-7	1982-2004 Monthly Estimated Commercial Landings of Bigeye Tuna	A.43
A-4-8	1982-2004 Monthly Estimated Commercial Landings of Blue-lined Snapper	A.43
A-4-9	1982-2004 Monthly Estimated Commercial Landings of Spiny Lobster	A.44
A-4-10	1982-2004 Monthly Estimated Commercial Landings of Surgeonfish (Tangs)	A.44

AMERICAN SAMOA 2004 FISHERY STATISTICS

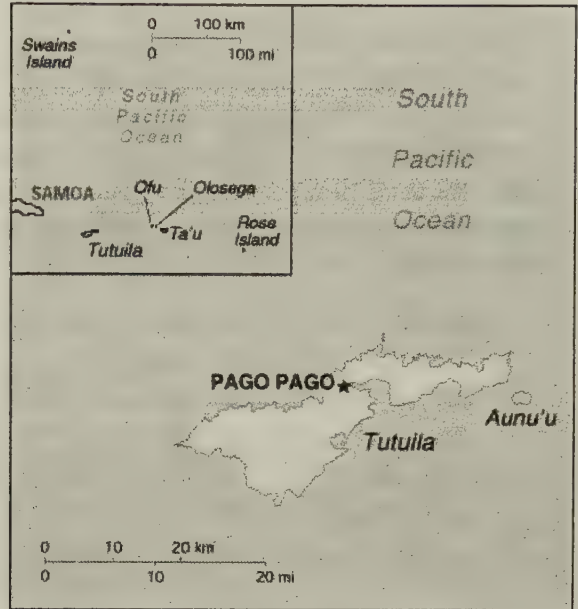
INTRODUCTION

Location: 14°S latitude, 170°W longitude

Islands: Tutuila, Aunu'u, the Manu'a Islands (Ofu, Olesaga, Ta'u), Rose Atoll (uninhabited), and Swains Island (sparsely populated)

Population: 57,800, 80 % on Tutuila; (*The World Factbook*, 2006)

Economy: tuna industry



The American Samoa Department of Marine and Wildlife Resources (DMWR; formerly the Office of Marine Resources) is located near Pago Pago on Tutuila and has been collecting commercial fisheries data from the Tutuila fleet since the early 1970s. In 1983 it extended its coverage to the Manu'a Islands, and in 1985 DMWR modified its data collection programs to include recreational and subsistence fisheries data.

American Samoa
Source: <<http://www.cia.gov/cia/publications/factbook/geos/aq.html>>;
The World Factbook

American Samoa's domestic fisheries have typically been small-boat, 1-day fisheries using primarily 28-to 32-foot long, outboard-engine-powered catamarans called *alias* (pronounced *ah-lee-ahs*). Traditionally, trolling and bottomfishing were the major methods of fishing, and a little spearfishing, netting, and vertical longlining occurred occasionally. Beginning in about mid-1995, some of the traditional *alias* began converting to horizontal longlining. During 1996, horizontal longlining became the largest fishery in American Samoa based on total landed weight of the catch, even though only about one-third of the fleet had converted to this method. Over the next few years the fleet grew rapidly with the addition of new *alias* up to about 38 feet in length and, more significantly, with the addition of other larger mono-hull vessels that fished much longer trips. The primary target species is albacore tuna, but the fishery has also resulted in significant increases in landings of yellowfin tuna, skipjack tuna, bigeye tuna, wahoo, and other incidentally caught species.

During 2004, the various fishery monitoring programs in American Samoa identified 61 active vessels — 56 home ported on Tutuila and 5 in the Manu'a islands. Many of these vessels participated in more than one fishery, and 43 of the Tutuila boats (including 28 vessels that were more than 50 feet in length) did at least some longlining. Of the 61 total boats, 19 participated in the troll and bottomfish fisheries, and 3 were used in other forms of fishing activities. On average, the *alia* fleet on Tutuila consisted of 3-man crews, fished 8 hours, and caught about 190 pounds of fish; the Manu'a-based fleet typically had 3-man crews, fished about 5 hours, and landed 110 pounds of fish. Essentially all of the longlining was based out of Tutuila, where the majority of the catch was offloaded to the canneries.

SPECIAL NOTE ON DATA REVISIONS

Significant changes in the fisheries occurred in the mid-1990s with the development of the longline fishery and a nighttime, boat-based scuba spearfishing fishery. Because of the nature of these fisheries, biases began creeping into the effort-counting and interviewing processes of the DMWR surveys. By 1997 WPacFIN staff discovered the problems, and modifications to survey techniques were implemented by DMWR staff. It became clear by early 1998 that the algorithms used to expand the survey data and estimate for the total fishery also needed to be changed. The new data processing system that better handles the more complex nature of today's fisheries in American Samoa as detailed below has been completed and was used to reprocess the historical time series. This volume includes the results of this new improved algorithm, but additional data quality control procedures and algorithm enhancements are still being made that may cause small changes in subsequent reports.

DATA COLLECTING SYSTEM

The data collecting systems used by DMWR to monitor the changing fisheries of American Samoa have evolved considerably over the past 20 years. One common factor of all systems has been that they have relied heavily on personal contacts with the fishermen and on a significant amount of dockside monitoring and interviewing.

The major systems in place today include: (1) boat-based, access-point creel surveys on Tutuila and the Manu'a Islands (formerly referenced as Offshore Creel Survey System), which are the mainstay of the monitoring program; (2) a mandatory purchase receipt "trip ticket" system for fish businesses on Tutuila (Commercial Purchase System); (3) a vessel history and tracking system for all American Samoa vessels (Vessel Classification System); (4) a Daily Effort Census System for detailed tracking of the longline fishery; (5) a mandatory federal Longline Logbook System; (6) a Cannery Landings System to document all landings at the two canneries made by domestic and foreign vessels; and (7) a size frequency sampling program at the canneries. Data from all these major systems are used to develop the best available data for the complex and ever changing fisheries of American Samoa. More details of the first five data collection systems follow.

Commercial Catch Monitoring System. From 1982 to 1985, DMWR obtained catch statistics by interviewing commercial fishermen at the end of their trips and kept records of as much commercial fishing activity as possible. This data collection method was accurate for trips where interviews were conducted. However, it was very labor intensive, did not cover all trips, and did not include the small but growing recreational and subsistence fisheries.

Vessel Classification System. Beginning in the early 1980s, a vessel classification system was established to collect information on all vessels participating in any domestic fisheries. This system provides the following information on American Samoa vessels:

- Boat Name
- Registration Number
- Propulsion
- Length
- Beam
- Number of Engines
- Type of Use
- Trailered
- Number of Crew
- Depth
- Engine Type
- Fuel Type
- Material
- Horsepower
- Port
- Methods of Fishing
- Federal Permit

Boat-based Creel Survey System. In October 1985, a new creel survey sampling system was implemented on Tutuila to provide better coverage and statistics on all boat-based fisheries. This replaced the Commercial Catch Monitoring System. Soon afterwards, similar monitoring programs were established in the Manu`a Islands, where the fishing fleets are centrally located and small enough for statistics to be collected for nearly every trip. The surveyors in the Manu`a Islands send their monitoring forms to DMWR in Tutuila for processing. The Manu`a statistics are entered and compiled on a monthly basis and are adjusted by an estimated percent coverage factor that is usually 100%.

The details of the Tutuila boat-based fishery sampling program have changed over the years to accommodate changes in the fisheries; but it is still a systematic, random sampling program that stratifies sampling by type of day (either weekday or weekend/holiday) and by fishing method. For logistical and cultural reasons, Sundays are no longer sampled as effort is extremely low and not similar to other weekend/holiday-type days.

DMWR staff normally sample 2 weekdays and 1 weekend/holiday per week. During survey days, counts of total participation are collected, and as many returning vessels as possible are interviewed for catch, effort, and biological samples. Tutuila is divided into six sample areas, five of which are sampled. It is assumed that the non-sampled area is similar to the sampled areas in fishing activity and success rate. Furthermore, it is assumed that the fishermen interviewed are representative of the entire fishing population and that they give accurate information.

Unless contrary information is available from dockside questioning of knowledgeable persons, a boat is assumed to be "out fishing" if its trailer is at a boat ramp or the boat is missing from its normal berthing area during the 18 hour survey day. The following participation information is recorded for all boats determined to be "out fishing." The participation data is expanded to estimate the total number of fishing trips in Tutuila.

- Sample Date
- Boat Name
- 3 Observation Times
- Type of Day
- Fishing Method
- Sample Area

The remaining data items listed below are collected on each boat for which an interview is successfully completed.

- | | |
|--------------------------------------|--|
| • Interview Time * | • Species Caught * |
| • Area Fished | • Number of Pieces for Each Species |
| • Home Island | • Disposition of Species* |
| • Total Hours Fished (Trip Length) * | • Weight in Pounds for Each Species * |
| • Number of Fishermen | • Condition of Species if not Whole |
| • Number of Gear Used | • Length of Fish (Converted to Weight) |
| • Total Trip Weight in Pounds * | • Price per Pound for Each Species |

It is not always possible to obtain information on all the items listed. However, items marked with an asterisk (*) are considered essential for data expansion purposes. Also, identification and weight of each species are often not obtainable; in this case a code for species groupings (e.g., miscellaneous bottom fish) is used. The interview data is later expanded to estimate the total catch per fishing trips and other CPUE measures in Tutuila. The catch-per-trip estimate is multiplied by the number-of-trips estimate for each stratum to obtain a total catch estimate for Tutuila.

Commercial Purchase System. For several decades the two canneries provided monthly summary statistics about their purchases of fish from all vessels, foreign and domestic. Then in September 1990, a Commercial Purchase (receipt book) System was instituted in which all other businesses in Samoa that buy fish directly from fishermen were required by local law to submit a copy of their purchase receipts to DMWR. Receipt books are issued by DMWR to all fish markets, stores, hotels, and restaurants that resell fish, either whole or prepared. The following information is collected via these receipts.

- | | |
|--------------------|-------------------------------------|
| • Invoice Date | • Fishing Method |
| • Invoice Number | • Species Bought |
| • Buyer's Name | • Number of Pieces for Each Species |
| • Boat Name, Owner | • Weight in Pounds for Each Species |
| • Area Fished | • Price per Pound for Each Species |

Federal Longline Logbook System and Daily Effort Census. In January 1996, in response to the developing longline fishery, a federal longline logbook system was implemented by NMFS. All longline fishermen are required to obtain a federal permit and to submit logs containing detailed data on each of their sets and the resulting catch. From 1996 to 1999, the logbooks submitted by the local longliners were edited by the NMFS fisheries monitoring agent in Samoa for any missing data and were then sent to PIFSC (formerly the Honolulu Laboratory) for further editing and data processing.

In July 1999, to improve monitoring of the fast-growing longline fishery, DMWR implemented a Daily Effort Census (DEC) for all federally permitted longline vessels. Six days a week, DMWR staffs make two visits a day to ports where longline vessels move. The staff document whether each vessel on the list is “in port” or “out fishing.” The DEC data are used to track the activity of each vessel and to help ensure all fishing log sheets are submitted by the fishermen. To further improve the quality and timeliness of the data, beginning in January 2000 logbook data collecting, editing, and processing has been done by DMWR in Samoa and downloaded to NMFS periodically.

The following information is recorded for each set these longline fishermen make:

- | | |
|----------------------------------|---|
| • Set Date | • Begin Set Time |
| • Vessel | • Begin Set Latitude and Longitude |
| • Date of Departure | • End Set Time |
| • Port of Departure | • End Set Latitude and Longitude |
| • Date of Arrival | • Haul Date |
| • Port of Arrival | • Begin Haul Date |
| • Observer on Board | • Begin Haul Latitude and Longitude |
| • Target Species | • End Haul Time |
| • Bait Used | • End Haul Latitude and Longitude |
| • Mainline Length | • No. of Pelagic Species Kept |
| • No. of Hooks | • No. of Pelagic Species Released |
| • No. of Hooks/Float | • No. of Sharks Finned |
| • No. of Lightsticks Used | • No. of Sharks Kept |
| • Bird Catch Mitigation Measures | • No. of Sharks Released |
| • Wind Detection | • No. of Protected Species Released Alive |
| • Wave Height | • No. of Protected Species Released Injured |
| • Sea Surface Temperature | • No. of Protected Species Released Dead |
| • Wind Speed | |

Logbook data are also compared with cannery unloading data for Samoa-based boats on a monthly basis to identify boats that unload at the canneries but did not turn in any longline logs or turn in just a part of the logs that they are required to.

The longline logbooks provide no information on the pounds caught or the disposition of fish caught by large longliners, which are not covered by the Boat-Based Creel Survey. Beginning in April 2001, length data from South Pacific Regional Longline Port Sampling Forms were collected for Samoa-based longliners and converted to pounds to provide better estimates of the pounds per fish of fish caught by the large longliners. Disposition data were also entered in the comments section of these forms to provide sampled disposition data on the fish caught.

DATA PROCESSING SYSTEM

As the data collecting systems used by DMWR to monitor the fisheries in American Samoa have changed over the years, so have the data processing systems. Numerous versions of database and utility software and microcomputer systems have been used over the years to meet the growing demand for processing the collected data. Generally speaking, these changes, with their significant emphasis on improving data quality and their cross validation among systems, have made the data processing systems more robust, complex, and complete.

Several important principles have remained constant over time: (1) keep data processing close to the source of data collecting; (2) provide all of the needed software tools to ensure the quality of data; (3) make the systems user friendly and functional for the local staff; and (4) maintain as many standards as possible throughout the time series of data collected.

Typically, when upgrades (such as changes in expansion and reporting algorithms for the creel survey data and commercial landings data) have been made to data processing systems, the entire time series of data would be reprocessed using the same algorithms so that trends in the fisheries would remain as intact as possible. The annual and monthly estimated commercial landings data and the corresponding time series figures included in this report were produced with the versions of data processing systems in use in May 2001. To help the reader understand the origin of the data included in this report, a general description of these processes follows. Please note that it does not include the details on many minor changes that have occurred throughout the evolutionary history of these systems.

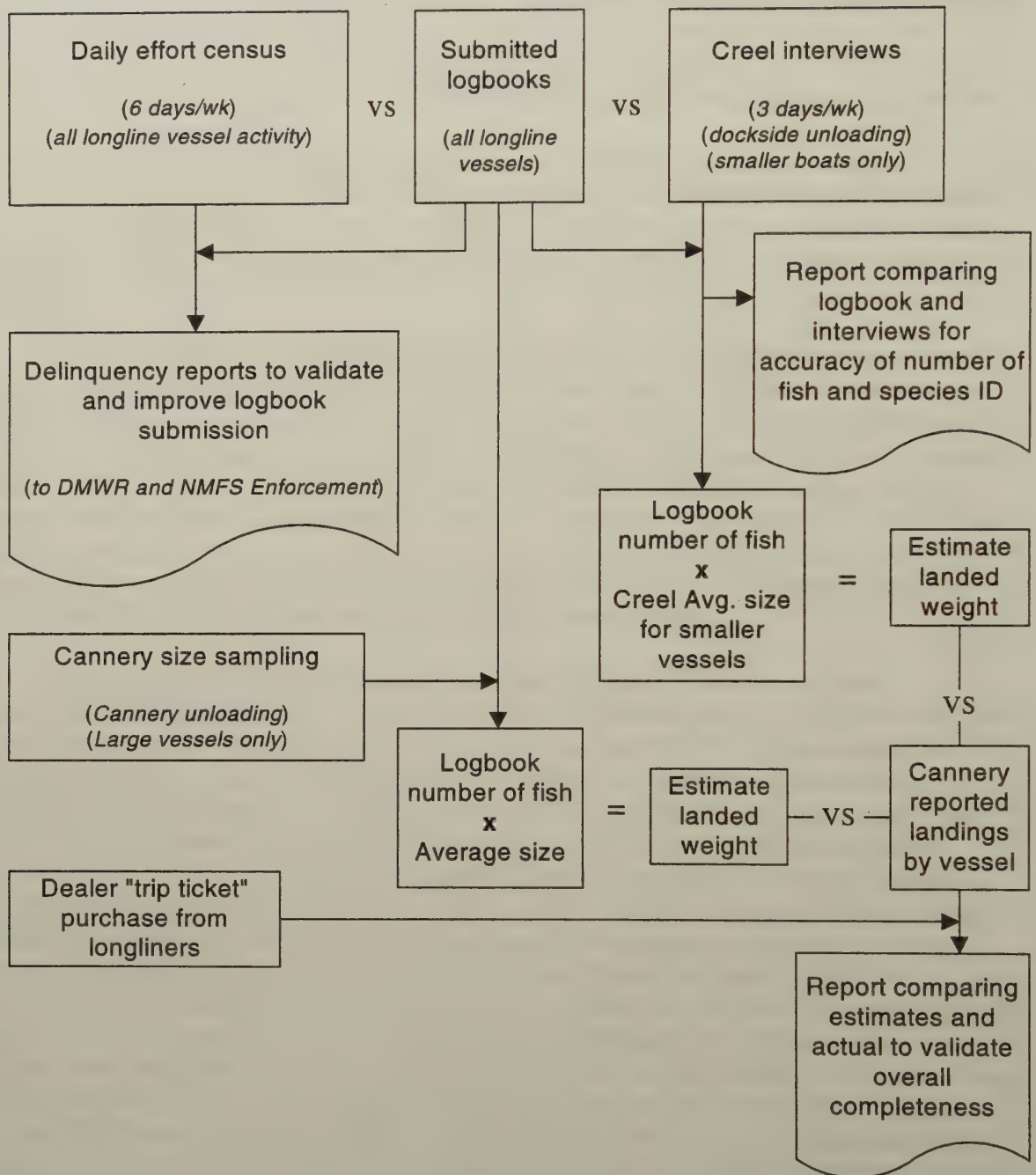
The data from 1982 to 1985 have been imported directly from the original Commercial Catch Monitoring System used before the implementation of the boat-based creel survey. Since 1986, the boat-based creel survey data expansion system has been the central system for estimating total commercial landings in American Samoa. In short, the survey data expansion process involves multiplying the average daily participation by the average catch per trip for each stratum. For the years 1986 to 1990, commercial sales portions of the expanded creel survey data from Tutuila and the Manu'a Islands were combined to produce estimated total commercial landings. Since 1990, with the implementation of the mandatory fish dealer receipt book system on Tutuila, further adjustments have been made to these combined creel data by using receipt book data. These adjustments made significant improvements in overall totals as they helped adjust for sales not monitored through the boat-based survey (e.g., shoreline and strictly nighttime commercial fishing). Species totals modified with these types of adjustments are flagged in reports with an asterisk. Finally, in the late 1990s when larger longline vessels began landing their catches directly at the canneries and thus out of the monitoring capabilities of the standard creel surveys, the longline logbook system and cannery size frequency sampling data entered the algorithm to fill the gap for this portion of the fishery. This data added the landings of these vessels to create a more complete picture of the estimated total commercial landings for the Territory.

One of the most significant recent improvements made in the data processing systems for DMWR has been in the area of cross-system data validation and quality control. By

A.7

collecting similar data from several sources using different monitoring and reporting tools, the quality of reported data can be cross-referenced between systems to provide insight into the validity and completeness of each data set. The following schematic shows some cross-system data validation relationships and features that are used in the most current version of the integrated DMWR fisheries monitoring programs (see next page):

Data Quality and Cross Validation American Samoa Longline Example



DATA REPORTING SYSTEM

After all editing, quality control, and data interpretation activities are completed, monthly and annual commercial landings data tables by species are generated. Each of the commercial landings data tables contains the common name, weight in pounds, value in dollars, the average price per pound of each species or species group, and whether the data was modified by Commercial Purchase System data (denoted by asterisks). The monthly data tables are based on monthly expansions of the Tutuila Boat-Based Creel Survey Data with enhancements by monthly Longline Logbook, Commercial Purchase System, and Manu'a data as explained previously. Annual data tables are based on combined annual expansions of the creel data for the entire calendar year with similar annual enhancements from Longline Logbook, Commercial Purchase System, and Manu'a data. Since the monthly and annual data tables are based on separate monthly and annual expansion of the creel data, the annual data tables are not the exact sum of the 12 monthly data tables, but they fall within the standard error. These data tables are listed as Tables A-1 to A-13 in this report.

The charts that make up the rest of the report are for groups of species as well as for some of the dominant individual species. Some of the charts in this volume are new or modified from earlier volumes. The top ten commercial species for the year are emphasized, and they can change from year to year. The species in the species groups used in the charts of this report are defined below.

To access the most up-to-date data and charts, please visit the WPacFIN Website at <http://www.pifsc.noaa.gov/wpacfin>.

Note: Many of the species included in this report have been recategorized over the years. For example, the Magnuson Fishery Conservation and Management Act of 1976 was amended in 1992 to include tunas in the Pelagic Management Unit Species (PMUS) category. However, this FSWP volume will maintain the original species categorizations from previous volumes for comparative purposes. As such, tunas are kept in a separate category.

I. Pelagic Management Unit Species (PMUS)

Although the Magnuson Fishery Conservation and Management Act of 1976 was amended in 1992 to include tunas in the PMUS (PPMUS), this report series will continue to treat tunas as a separate category from the PPMUS. The PMUS category includes:

Other pelagic sharks	Black marlin
Blacktip reef shark	Striped marlin
Blue shark	Sailfish
Shortfin mako shark	Spearfish
Nurse shark	Swordfish
Thresher shark	Wahoo
White-tip oceanic shark	Pomfret
Mahimahi	Moonfish
Blue marlin	

II. Bottomfish Management Unit Species (BMUS)

Black jack	Pink snapper (opakapaka)
Amberjack	Flower snapper (gindai)
Giant trevally	Yellowtail snapper
Yelloweye opakapaka	Smalltooth jobfish (lehi)
Blacktip grouper	Longtail snapper (onaga)
Lunartail grouper	Squirrel snapper (ehu)
Blue-lined snapper	Ambon emperor
Gray jobfish	Redgill emperor

III. Billfish

Swordfish	Striped marlin
Blue marlin	Sailfish
Black marlin	Spearfish

IV. Tunas

Tunas	Bluefin tuna
Skipjack tuna	Yellowfin tuna
Dogtooth tuna	Bigeye tuna
Albacore	Kawakawa

V. Other Tuna

Tunas	Bluefin tuna
Dogtooth tuna	Kawakawa

VI. Fisheries Categories

A. Pelagics

Albacore
All pelagic sharks
Barracudas
Bigeye thresher shark
Bigeye tuna
Black marlin
Blacktip reef shark
Blue marlin
Blue shark
Bluefin tuna
Dogtooth tuna
Great barracuda
Hammerhead shark
Kawakawa
Longfin mako shark
Mackerel
Mahimahi
Moonfish
Nurse shark
Oilfish
Other billfish

Other pelagic fish
Other pelagic sharks
Other birds
Pelagic thresher shark
Pomfret
Rainbow runner
Sailfish
Shortfin mako shark
Silky shark
Skipjack tuna
Small barracuda
Snake mackerel
Spearfish
Striped marlin
Swordfish
Thresher shark
Tiger shark
Tunas
Wahoo
White-tip oceanic shark
Yellowfin tuna

B. Bottom Fish

Amberjack	Lunartail grouper
Ambon emperor	Mackerel scad (opelu)
Bigeye emperor	Multidens snapper
Bigeye scad	Netfin grouper
Bigeye trevally	Onespot snapper
Black triggerfish	Orangespot emperor
Black jack	Orangestripe triggerfish
Black snapper	Paddletail snapper
Blacktip grouper	Peacock grouper
Blood snapper	Picassofish
Blue kingfish trevally	Pink snapper (opakapaka)
Blue triggerfish	Pinktail triggerfish
Blue-lined gindai	Pristipomoides/Etelis
Blue-lined snapper	Redgill emperor
Bluefin trevally	Rufous snapper
Blueline bream	Smalltooth jobfish (lehi)
Bottomfish (assorted)	Smalltooth grouper
Bridled triggerfish	Spotted grouper
Brown jobfish	Squirrel snapper (ehu)
Deepwater snappers (misc)	Stone's snapper
Emperors (misc)	Striped grouper
Flagtail grouper	Tomato grouper
Flower snapper (gindai)	Twinspot/red snapper
Giant trevally	Twospot bristletooth
Goldenline bream	Whitemouth trevally
Goldspot trevally	Yellow-margined snapper
Gray jobfish	Yellow-eyed bristletooth
Groupers (misc)	Yelloweye snapper
Jacks (misc)	Yelloweye opakapaka
Kusakar's snapper	Yellowspot grouper
Longnose emperor	Yellowtail snapper
Longtail snapper (onaga)	

C. Reef Fish

Arenatus wrasse	Porcupinefish
Bandcheck wrasse	Rabbitfish
Barred flagtail	Red snapper
Barred thicklip	Reef fish (assorted)
Bigeye squirrelfish	Rockmover wrasse
Bigeyes	Rudderfish
Bigscale soldierfish	Rudderfish (biggibus)
Blackeye thicklip	Rudderfish (cinerascens)
Blue-banded surgeonfish	Saber squirrelfish
Brown surgeonfish	Sergeant major
Butterflyfishes (misc)	Squirrelfish
Cardinalfish	Striped bristletooth
Checkerboard wrasse	Surgeonfishes/tangs
Christmas wrasse	Sweepers
Cigar wrasse	Sweetlips
Convict tang	Terapon perch
Flagtails	Tilefishes
Floral wrasse	Triggerfish
Flounders	Triple tail wrasse
Harlequin tuskfish	Two-spotted hawkfish
Inshore groupers	Unicornfishes (misc)
Inshore snappers	Weedy surge wrasse
Mullets	Whitepatch wrasse
Napoleon wrasse	Whitespotted surgeonfish
Naso tang	Wrasses (misc)
Orange goatfish	Yellow goatfishes
Orangespine unicornfish	Yellowfin surgeonfish
Parrotfishes (misc)	

D. Other

Anchovies	Milkfish
Angler flatfish	Misc sea urchins
Banded sergeant	Miscellaneous
Batfishes	Monogram monocle bream
Bigeye barracuda	Moray eels
Butterflyfish (auriga)	Needlefish
Butterflyfish (melannot.)	Octopus
Catfish	Octopus (cyanea)
Conger eels	Octopus (ornatus)
Coral crouchers	Pacific sailfin tang
Crabs	Prettyfins
Dottybacks	Racoon butterflyfish
Dragon eel	Rays
Eagle ray	Remoras
Eels	Saddleback butterflyfish
Emperor angelfish	Salmon
False mullet	Sand and coral rubble
Flame hawkfish	Sea shells
Flashlightfishes	Seahorses
Flyingfish	Seaweeds
Forktail rabbitfish	Shrimp
Fringelip mullet	Slipper lobster
Frogfishes	Spiny lobster
Giant moray eel	Spotted moray eels
Giant clam	Squid
Green snails	Sunfish
Halfbeaks	Sweetlip emperor
Invertebrates, misc	Threadfin
Kona crab	Tilapia
Leatherback	Turban snail
Longnose parrotfish	Undulated moray eel
Lowfin drummer	Western drummer
Mangrove clam	Yellowmargin moray eel
Mangrove crab	

INTERPRETATION OF STATISTICS

The user is reminded to pay heed to the precautions and assumptions identified earlier in this document when making interpretations of or inferences from data reported in the tables and graphs. Remember also that the commercial landings summaries are not based on a census of all the fishing activities, but on samples of those activities and on integration of data from four separate data systems. One of the major factors in expanding the creel survey data into monthly and annual estimates is the use of proportionality constants to adjust for percent coverage of the surveys. The flexibility of the survey design allows for refinement of these constants as additional information is gained on the fishing activities. If the constants are improved upon, the basic survey data can be expanded again to create better overall estimates. However, the variability and species composition would not be expected to change since these statistics are based on the actual survey information collected from the fishermen. The estimates of total landings are considered to be conservative because the catch from the subsistence inshore fisheries are currently not included in this document.

Table A-1
American Samoa Annual 2004 Estimated Commercial Landings

Species	Pounds	Value	Price/Lb	
Miscellaneous	10	\$0	\$0.00	*
Bigeye scad	65	\$65	\$1.00	*
Jacks (misc)	149	\$298	\$2.00	
Black jack	459	\$1,006	\$2.19	
Bigeye trevally	471	\$880	\$1.87	
Goldspot trevally	19	\$31	\$1.70	
Blue kingfish trevally	93	\$173	\$1.85	
Barracudas	1,468	\$2,915	\$1.99	
Bigeye barracuda	95	\$170	\$1.79	
Other pelagic sharks	185	\$198	\$1.07	
Bottomfish (assorted)	766	\$1,518	\$1.98	*
Pygmy grouper	2	\$4	\$1.75	
Groupers (misc)	99	\$175	\$1.77	
Greasy grouper	21	\$36	\$1.75	
Peacock grouper	31	\$56	\$1.82	
Flagtail grouper	70	\$136	\$1.95	
Tomato grouper	111	\$229	\$2.06	
Saddleback grouper	8	\$16	\$2.00	
White-edged lyretail	110	\$204	\$1.87	
Blacktip grouper	33	\$65	\$1.96	
Yellowspot grouper	3	\$6	\$1.85	
Spotted grouper	261	\$514	\$1.97	
Smalltooth grouper	144	\$288	\$2.00	
Lunartail grouper	203	\$417	\$2.06	
Blue-lined snapper	1,773	\$3,213	\$1.81	
Rufous snapper	65	\$136	\$2.09	
Onespot snapper	105	\$163	\$1.55	
Twinspot/red snapper	7	\$15	\$2.00	
Paddletail snapper	1,198	\$2,297	\$1.92	
Blood snapper	10	\$17	\$1.70	
Gray jobfish	1,551	\$2,904	\$1.87	
Pristipomoides/Etelis	134	\$402	\$3.00	
Yelloweye snapper	168	\$347	\$2.07	
Pink snapper (opakapaka)	1,587	\$2,843	\$1.79	*
Blue-lined gindai	53	\$194	\$3.65	
Flower snapper (gindai)	72	\$155	\$2.14	
Yellowtail snapper	60	\$126	\$2.09	
Smalltooth jobfish (lehi)	364	\$711	\$1.95	
Longtail snapper (onaga)	717	\$1,679	\$2.34	
Squirrel snapper (ehu)	670	\$1,623	\$2.42	*
Multidens snapper	18	\$33	\$1.85	
Black snapper	97	\$194	\$2.00	
Stone's snapper	103	\$212	\$2.07	
Kusakar's snapper	32	\$68	\$2.13	
Timor snapper	16	\$30	\$1.85	
Emperors (misc)	62	\$110	\$1.78	
Longnose emperor	341	\$639	\$1.87	
Ambon emperor	2,766	\$5,234	\$1.89	
Orangespot emperor	48	\$81	\$1.70	
Redgill emperor	1,557	\$3,048	\$1.96	
Oilfish	24	\$24	\$1.00	

Table A-1 (Cont.)
American Samoa Annual 2004 Estimated Commercial Landings

Species	Pounds	Value	\$/Lb	
Pomfret	206	\$514	\$2.50	
Rudderfish (cinerascens)	16	\$30	\$1.94	
Surgeonfishes/tangs	3,113	\$6,154	\$1.98	*
Unicornfishes (misc)	923	\$1,760	\$1.91	*
Squirrelfish	568	\$1,054	\$1.86	*
Saber squirrelfish	120	\$235	\$1.96	
Bigeye squirrelfish	48	\$102	\$2.10	
Parrotfishes (misc)	3,995	\$7,853	\$1.97	*
Terapon perch	13	\$26	\$2.00	
Wrasses (misc)	9	\$18	\$2.00	
Yellow goatfishes	44	\$122	\$2.75	
Orange goatfish	4	\$8	\$2.00	
Inshore groupers	568	\$1,092	\$1.92	*
Triggerfish	3	\$6	\$2.00	
Porcupinefish	79	\$159	\$2.00	
Inshore snappers	2	\$4	\$2.00	
Red snapper	161	\$273	\$1.70	
Mahimahi	8,284	\$16,107	\$1.94	*
Swordfish	8,951	\$18,753	\$2.10	*
Blue marlin	2,317	\$2,576	\$1.11	
Black marlin	982	\$982	\$1.00	
Sailfish	1,240	\$1,128	\$0.91	
Spearfish	155	\$232	\$1.50	
Rainbow runner	401	\$768	\$1.91	
Wahoo	447,788	\$419,239	\$0.94	
Skipjack tuna	517,791	\$320,499	\$0.62	
Dogtooth tuna	215	\$400	\$1.86	
Albacore	5,447,153	\$5,713,361	\$1.05	
Yellowfin tuna	1,951,533	\$1,763,767	\$0.90	
Bigeye tuna	496,246	\$547,789	\$1.10	
Kawakawa	104	\$181	\$1.75	
Moonfish	1,058	\$1,308	\$1.24	
Crabs	85	\$165	\$1.95	
Spiny lobster	516	\$2,137	\$4.14	*
Octopus	193	\$468	\$2.42	*
Giant clam	30	\$90	\$3.00	
Salmon	10	\$20	\$2.00	
TOTAL	8,913,393	\$8,865,278	\$0.99	

* Data replaced or modified by Actual Commercial Landings Data

Table A-2
American Samoa January 2004 Estimated Commercial Landings

Species	Pounds	Value	Price/Lb
Jacks (misc)	21	\$43	\$2.00
Black jack	163	\$370	\$2.27
Bigeye trevally	200	\$371	\$1.86
Barracudas	136	\$272	\$2.00
Bigeye barracuda	9	\$15	\$1.75
White-edged lyretail	5	\$9	\$1.75
Blue-lined snapper	133	\$250	\$1.88
Paddletail snapper	125	\$251	\$2.00
Gray jobfish	125	\$235	\$1.87
Yelloweye snapper	3	\$5	\$1.75
Pink snapper (opakapaka)	70	\$123	\$1.75 *
Smalltooth jobfish (lehi)	40	\$70	\$1.75
Longnose emperor	34	\$60	\$1.75
Ambon emperor	189	\$356	\$1.88
Redgill emperor	12	\$21	\$1.75
Surgeonfishes/tangs	373	\$746	\$2.00 *
Unicornfishes (misc)	106	\$212	\$1.99 *
Squirrelfish	72	\$144	\$2.00 *
Parrotfishes (misc)	313	\$623	\$1.99 *
Inshore groupers	83	\$164	\$1.99
Mahimahi	325	\$571	\$1.76 *
Swordfish	597	\$1,245	\$2.09 *
Wahoo	22,950	\$21,248	\$0.93
Skipjack tuna	21,155	\$13,417	\$0.63
Albacore	263,340	\$272,081	\$1.03
Yellowfin tuna	121,331	\$110,666	\$0.91
Bigeye tuna	21,429	\$23,572	\$1.10
Spiny lobster	44	\$176	\$4.00 *
TOTAL	453,382	\$447,311	\$0.99

* Data replaced or modified by Actual Commercial Landings Data

Table A-3
American Samoa February 2004 Estimated Commercial Landings

Species	Pounds	Value	Price/Lb
Jacks (misc)	24	\$49	\$2.00
Bigeye trevally	198	\$367	\$1.86
Goldspot trevally	17	\$29	\$1.70
Barracudas	57	\$114	\$2.00
Bigeye barracuda	15	\$26	\$1.70
Bottomfish (assorted)	191	\$380	\$2.00 *
Pygmy grouper	2	\$3	\$1.75
Groupers (misc)	18	\$32	\$1.80
Flagtail grouper	4	\$9	\$2.00
Spotted grouper	10	\$19	\$1.96
Lunartail grouper	4	\$8	\$2.00
Blue-lined snapper	339	\$600	\$1.77
Onespot snapper	45	\$52	\$1.15
Paddletail snapper	114	\$202	\$1.77
Gray jobfish	231	\$416	\$1.80
Yelloweye snapper	12	\$46	\$3.75
Pink snapper (opakapaka)	269	\$475	\$1.77 *
Yellowtail snapper	9	\$22	\$2.50
Longtail snapper (onaga)	54	\$140	\$2.60
Black snapper	39	\$79	\$2.00
Longnose emperor	42	\$79	\$1.87
Ambon emperor	386	\$715	\$1.85
Orangespot emperor	22	\$38	\$1.70
Redgill emperor	303	\$670	\$2.21
Rudderfish (cinerascens)	11	\$21	\$2.00
Surgeonfishes/tangs	379	\$742	\$1.96 *
Unicornfishes (misc)	126	\$247	\$1.96 *
Squirrelfish	66	\$133	\$2.00 *
Parrotfishes (misc)	253	\$506	\$2.00 *
Inshore groupers	26	\$52	\$2.00
Triggerfish	3	\$5	\$2.00
Mahimahi	302	\$508	\$1.68 *
Swordfish	481	\$830	\$1.73 *
Blue marlin	202	\$212	\$1.05
Black marlin	53	\$53	\$1.00
Wahoo	17,159	\$15,839	\$0.92
Skipjack tuna	12,208	\$7,214	\$0.59
Albacore	221,977	\$403,879	\$1.82
Yellowfin tuna	99,027	\$88,900	\$0.90
Bigeye tuna	38,754	\$42,678	\$1.10
Moonfish	83	\$103	\$1.24
Spiny lobster	78	\$256	\$3.29 *
Octopus	55	\$110	\$2.00 *
TOTAL	393,645	\$566,853	\$1.44

* Data replaced or modified by Actual Commercial Landings Data

Table A-4
American Samoa March 2004 Estimated Commercial Landings

Species	Pounds	Value	Price/Lb
Miscellaneous	25	\$46	\$1.85
Jacks (misc)	49	\$98	\$2.00
Black jack	66	\$132	\$1.98
Bigeye Trevally	301	\$559	\$1.86
Blue kingfish trevally	43	\$79	\$1.85
Barracudas	35	\$70	\$2.00
Bigeye barracuda	31	\$56	\$1.82
Other pelagic sharks	84	\$147	\$1.75
Peacock grouper	15	\$29	\$1.90
Flagtail grouper	27	\$54	\$2.00
Tomato grouper	37	\$76	\$2.05
Blacktip grouper	15	\$29	\$1.95
Yellowspot grouper	2	\$4	\$1.85
Spotted grouper	7	\$13	\$1.85
Smalltooth grouper	18	\$36	\$2.00
Lunartail grouper	74	\$151	\$2.03
Blue-lined snapper	536	\$950	\$1.77
Rufous snapper	8	\$17	\$2.13
Onespot snapper	4	\$8	\$1.78
Twinspot/red snapper	5	\$10	\$2.00
Paddletail snapper	214	\$378	\$1.77 *
Blood snapper	7	\$12	\$1.70
Gray jobfish	244	\$487	\$2.00
Yelloweye snapper	30	\$61	\$1.99
Pink snapper (opakapaka)	236	\$424	\$1.80 *
Blue-lined gindai	19	\$40	\$2.08
Flower snapper (gindai)	27	\$56	\$2.06
Yellowtail snapper	12	\$24	\$1.97
Smalltooth jobfish (lehi)	61	\$121	\$1.98
Longtail snapper (onaga)	92	\$193	\$2.09
Squirrel snapper (ehu)	168	\$360	\$2.14
Multidens snapper	12	\$22	\$1.85
Stone's snapper	21	\$42	\$2.00
Kusakar's snapper	25	\$50	\$2.00
Timor snapper	11	\$20	\$1.85
Longnose emperor	101	\$193	\$1.91
Ambon emperor	498	\$945	\$1.90
Redgill emperor	409	\$765	\$1.87
Pomfret	18	\$46	\$2.50
Surgeonfishes/tangs	191	\$382	\$2.00 *
Unicornfishes (misc)	27	\$54	\$2.00 *
Squirrelfish	94	\$187	\$2.00
Parrotfishes (misc)	407	\$788	\$1.94 *
Yellow goatfishes	2	\$4	\$2.00
Inshore groupers	56	\$113	\$2.00
Red snapper	40	\$69	\$1.70
Mahimahi	283	\$516	\$1.82 *
Swordfish	1,428	\$2,734	\$1.91 *
Blue marlin	847	\$847	\$1.00
Sailfish	161	\$147	\$0.91
Rainbow runner	54	\$103	\$1.91

Table A-4 (cont.)
American Samoa March 2004 Estimated Commercial Landings

Species	Pounds	Value	\$/Lb
Wahoo	12,035	\$11,002	\$0.91
Skipjack tuna	9,590	\$6,458	\$0.67
Dogtooth tuna	56	\$98	\$1.75 *
Albacore	241,882	\$245,363	\$1.01
Yellowfin tuna	63,647	\$57,188	\$0.90
Bigeye tuna	36,381	\$40,175	\$1.10
Kawakawa	93	\$163	\$1.75
Moonfish	285	\$353	\$1.24 *
Spiny lobster	194	\$752	\$3.88 *
Octopus	10	\$15	\$1.50 *
TOTAL	371,350	\$374,303	\$1.01

* Data replaced or modified by Actual Commercial Landings Data

Table A-5
American Samoa April 2004 Estimated Commercial Landings

Species	Pounds	Value	Price/Lb
Black jack	19	\$38	\$2.00
Bigeye trevally	236	\$438	\$1.86
Tomato grouper	7	\$14	\$2.00
Spotted grouper	33	\$65	\$1.96
Lunartail grouper	9	\$18	\$2.00
Blue-lined snapper	149	\$272	\$1.83 *
Rufous snapper	4	\$9	\$2.26
Paddletail snapper	87	\$166	\$1.91 *
Gray jobfish	34	\$64	\$1.90
Yelloweye snapper	8	\$16	\$2.00
Pink snapper (opakapaka)	528	\$950	\$1.80 *
Blue-lined gindai	7	\$94	\$13.4
Flower snapper (gindai)	11	\$22	\$2.00
Yellowtail snapper	4	\$8	\$2.00
Smalltooth jobfish (lehi)	9	\$18	\$2.00
Longtail snapper (onaga)	46	\$92	\$2.00
Squirrel snapper (ehu)	54	\$132	\$2.44 *
Stone's snapper	19	\$38	\$2.00
Kusakar's snapper	3	\$6	\$2.00
Ambon emperor	442	\$833	\$1.89
Redgill emperor	132	\$249	\$1.89
Pomfret	54	\$135	\$2.50
Surgeonfishes/tangs	197	\$404	\$2.05 *
Unicornfishes (misc)	57	\$119	\$2.09 *
Squirrelfish	44	\$81	\$1.82 *
Parrotfishes (misc)	161	\$314	\$1.94 *
Inshore groupers	71	\$146	\$2.06 *
Mahimahi	461	\$922	\$2.00 *
Swordfish	1,154	\$2,308	\$2.00 *
Black marlin	48	\$48	\$1.00
Wahoo	17,229	\$15,679	\$0.91
Skipjack tuna	24,815	\$16,839	\$0.68
Albacore	471,370	\$487,396	\$1.03
Yellowfin tuna	164,059	\$148,202	\$0.90
Bigeye tuna	57,087	\$62,842	\$1.10
Octopus	86	\$172	\$2.00 *
TOTAL	738,734	\$739,148	\$1.00

* Data replaced or modified by Actual Commercial Landings Data

Table A-6
American Samoa May 2004 Estimated Commercial Landings

Species	Pounds	Value	Price/Lb
Jacks (misc)	16	\$32	\$2.00
Black jack	82	\$164	\$2.00
Bigeye trevally	32	\$55	\$1.75
Barracudas	60	\$120	\$2.00
Peacock grouper	22	\$38	\$1.75
Flagtail grouper	37	\$70	\$1.90
Tomato grouper	31	\$59	\$1.94
Blacktip grouper	14	\$28	\$2.00
Smalltooth grouper	4	\$8	\$2.00
Lunartail grouper	24	\$48	\$2.00
Blue-lined snapper	75	\$140	\$1.86
Rufous snapper	2	\$4	\$2.00
Paddletail snapper	138	\$241	\$1.75
Gray jobfish	98	\$196	\$2.00 *
Yelloweye snapper	15	\$30	\$2.00
Pink snapper (opakapaka)	79	\$143	\$1.81 *
Blue-lined gindai	21	\$42	\$2.00
Flower snapper (gindai)	23	\$46	\$2.00
Yellowtail snapper	9	\$18	\$2.00
Smalltooth jobfish (lehi)	73	\$146	\$2.00
Longtail snapper (onaga)	132	\$264	\$2.00
Squirrel snapper (ehu)	241	\$603	\$2.50 *
Stone's snapper	65	\$119	\$1.85
Longnose emperor	2	\$4	\$2.00
Ambon emperor	137	\$242	\$1.77
Redgill emperor	17	\$32	\$1.89
Pomfret	69	\$171	\$2.50
Surgeonfishes/tangs	168	\$352	\$2.09 *
Unicornfishes (misc)	165	\$316	\$1.91 *
Squirrelfish	77	\$141	\$1.84 *
Parrotfishes (misc)	152	\$300	\$1.98 *
Inshore groupers	43	\$90	\$2.10 *
Mahimahi	869	\$1,637	\$1.88 *
Swordfish	1,012	\$2,024	\$2.00 *
Blue marlin	512	\$525	\$1.02 *
Sailfish	32	\$30	\$0.91
Rainbow runner	18	\$35	\$1.91
Wahoo	19,700	\$18,150	\$0.92
Skipjack tuna	10,205	\$6,205	\$0.61
Dogtooth tuna	67	\$134	\$2.00
Albacore	690,399	\$713,702	\$1.03
Yellowfin tuna	86,283	\$79,757	\$0.92
Bigeye tuna	51,786	\$56,965	\$1.10
Moonfish	352	\$435	\$1.24
Octopus	27	\$51	\$1.88 *
Giant clam	30	\$90	\$3.00
TOTAL	863,413	\$884,002	\$1.02

* Data replaced or modified by Actual Commercial Landings Data

Table A-7
American Samoa June 2004 Estimated Commercial Landings

Species	Pounds	Value	Price/Lb	
Barracudas	3	\$6	\$2.00	
Bottomfish (assorted)	3,672	\$7,905	\$2.15	*
Spotted grouper	44	\$87	\$1.96	
Blue-lined snapper	212	\$404	\$1.91	
Paddletail snapper	50	\$95	\$1.90	*
Longtail snapper (onaga)	35	\$105	\$3.00	*
Squirrel snapper (ehu)	82	\$186	\$2.27	*
Emperors (misc)	155	\$276	\$1.78	
Redgill emperor	225	\$425	\$1.89	
Surgeonfishes/tangs	141	\$270	\$1.92	*
Unicornfishes (misc)	7	\$13	\$1.90	*
Squirrelfish	112	\$199	\$1.77	*
Parrotfishes (misc)	292	\$579	\$1.99	*
Inshore groupers	49	\$91	\$1.88	*
Mahimahi	481	\$962	\$2.00	
Swordfish	321	\$642	\$2.00	*
Spearfish	156	\$234	\$1.50	
Wahoo	35,162	\$32,400	\$0.92	
Skipjack tuna	70,783	\$42,545	\$0.60	
Albacore	762,196	\$784,777	\$1.03	
Yellowfin tuna	119,238	\$106,290	\$0.89	
Bigeye tuna	23,488	\$26,019	\$1.11	
Spiny lobster	6	\$60	\$10.0	*
TOTAL	1,016,907	\$1,004,569	\$0.99	

* Data replaced or modified by Actual Commercial Landings Data

Table A-8
American Samoa July 2004 Estimated Commercial Landings

Species	Pounds	Value	Price/Lb	
Barracudas	279	\$558	\$2.00	
Bottomfish (assorted)	834	\$1,669	\$2.00	*
Spotted grouper	12	\$23	\$1.96	
Blue-lined snapper	56	\$106	\$1.91	
Paddletail snapper	50	\$88	\$1.75	*
Pink snapper (opakapaka)	65	\$163	\$2.50	*
Squirrel snapper (ehu)	60	\$120	\$2.00	*
Emperors (misc)	41	\$73	\$1.78	
Redgill emperor	59	\$112	\$1.89	
Surgeonfishes/tangs	235	\$460	\$1.96	*
Unicornfishes (misc)	30	\$60	\$2.00	*
Squirrelfish	34	\$64	\$1.87	*
Parrotfishes (misc)	205	\$410	\$2.00	*
Inshore groupers	28	\$56	\$2.00	*
Mahimahi	459	\$918	\$2.00	*
Swordfish	334	\$668	\$2.00	*
Blue marlin	240	\$292	\$1.22	
Wahoo	54,092	\$49,801	\$0.92	
Skipjack tuna	156,267	\$95,570	\$0.61	
Dogtooth tuna	46	\$81	\$1.75	
Albacore	642,014	\$585,199	\$0.91	
Yellowfin tuna	517,826	\$463,806	\$0.90	
Bigeye tuna	48,240	\$53,139	\$1.10	
Spiny lobster	14	\$42	\$3.00	*
TOTAL	1,421,519	\$1,253,475	\$0.88	

* Data replaced or modified by Actual Commercial Landings Data

Table A-9
American Samoa August 2004 Estimated Commercial Landings

Species	Pounds	Value	Price/Lb
Jacks (misc)	13	\$26	\$2.00
Bigeye trevally	9	\$17	\$1.86
Blue kingfish trevally	6	\$10	\$1.85
Barracudas	208	\$412	\$1.98
Bigeye barracuda	12	\$21	\$1.80
Groupers (misc)	28	\$50	\$1.76
Greasy grouper	17	\$30	\$1.75
White-edged lyretail	45	\$83	\$1.85
Spotted grouper	4	\$9	\$1.96
Smalltooth grouper	71	\$142	\$2.00
Blue-lined snapper	42	\$79	\$1.88
Paddletail snapper	67	\$133	\$2.00
Gray jobfish	157	\$294	\$1.87
Yelloweye snapper	45	\$82	\$1.84
Pink snapper (opakapaka)	48	\$84	\$1.75 *
Smalltooth jobfish (lehi)	26	\$47	\$1.80
Squirrel snapper (ehu)	233	\$582	\$2.50 *
Black snapper	33	\$65	\$2.00
Ambon emperor	100	\$189	\$1.88
Redgill emperor	85	\$160	\$1.89
Surgeonfishes/tangs	288	\$576	\$2.00 *
Unicornfishes (misc)	115	\$184	\$1.60 *
Squirrelfish	85	\$142	\$1.67 *
Parrotfishes (misc)	445	\$848	\$1.91 *
Yellow goatfishes	5	\$10	\$2.00
Orange goatfish	4	\$7	\$2.00
Inshore groupers	43	\$86	\$2.00 *
Red snapper	12	\$20	\$1.70
Mahimahi	1,305	\$2,610	\$2.00
Swordfish	378	\$806	\$2.13 *
Blue marlin	418	\$510	\$1.22
Sailfish	289	\$263	\$0.91
Rainbow runner	14	\$26	\$1.91
Wahoo	54,833	\$51,838	\$0.95
Skipjack tuna	103,569	\$64,716	\$0.62
Albacore	462,917	\$476,426	\$1.03
Yellowfin tuna	426,258	\$387,904	\$0.91
Bigeye tuna	79,142	\$87,700	\$1.11
Spiny lobster	37	\$114	\$3.08 *
TOTAL	1,131,403	\$1,077,301	\$0.95

* Data replaced or modified by Actual Commercial Landings Data

Table A-10
American Samoa September 2004 Estimated Commercial Landings

Species	Pounds	Value	Price/Lb	
Bigeye scad	65	\$65	\$1.00	*
Barracudas	194	\$388	\$2.00	
Bigeye barracuda	1	\$1	\$1.80	
Other pelagic sharks	23	\$11	\$0.50	
White-edged lyretail	2	\$4	\$2.00	
Lunartail grouper	31	\$61	\$2.00	
Blue-lined snapper	24	\$45	\$1.88	
Onespot snapper	27	\$52	\$1.94	
Paddletail snapper	116	\$232	\$2.00	
Gray jobfish	44	\$83	\$1.87	
Pristipomoides/Etelis	1	\$2	\$3.00	
Ambon emperor	37	\$70	\$1.92	
Orangespot emperor	30	\$52	\$1.70	
Redgill emperor	53	\$100	\$1.90	
Surgeonfishes/tangs	161	\$322	\$2.00	*
Unicornfishes (misc)	46	\$92	\$2.00	*
Squirrelfish	9	\$18	\$2.00	*
Parrotfishes (misc)	425	\$849	\$2.00	*
Inshore groupers	16	\$32	\$2.00	*
Red snapper	40	\$68	\$1.70	
Mahimahi	1,306	\$2,583	\$1.98	*
Swordfish	540	\$1,080	\$2.00	*
Blue marlin	1	\$1	\$1.22	
Sailfish	317	\$289	\$0.91	
Rainbow runner	16	\$30	\$1.91	
Wahoo	71,991	\$67,978	\$0.94	
Skipjack tuna	25,516	\$15,782	\$0.62	
Albacore	473,666	\$487,518	\$1.03	
Yellowfin tuna	169,396	\$154,178	\$0.91	
Bigeye tuna	66,401	\$73,522	\$1.11	
Moonfish	91	\$113	\$1.24	
Spiny lobster	33	\$132	\$4.00	*
TOTAL	810,616	\$805,753	\$0.99	

* Data replaced or modified by Actual Commercial Landings Data

Table A-11
American Samoa October 2004 Estimated Commercial Landings

Species	Pounds	Value	Price/Lb
Miscellaneous	18	\$33	\$1.85
Black jack	19	\$57	\$3.00
Bigeye trevally	71	\$142	\$2.00
Barracudas	209	\$408	\$1.96
Bigeye barracuda	4	\$7	\$1.80
Other pelagic sharks	110	\$55	\$0.50
Bottomfish (assorted)	452	\$903	\$2.00 *
Flagtail grouper	8	\$16	\$1.88
Tomato grouper	30	\$65	\$2.17
Saddleback grouper	10	\$21	\$2.00
White-edged lyretail	20	\$41	\$2.00
Blacktip grouper	3	\$5	\$1.85
Spotted grouper	126	\$252	\$2.00
Smalltooth grouper	36	\$71	\$2.00
Lunartail grouper	36	\$81	\$2.25
Blue-lined snapper	230	\$432	\$1.88
Rufous snapper	3	\$9	\$3.00
Onespot snapper	25	\$48	\$1.94
Paddletail snapper	237	\$478	\$2.02
Gray jobfish	260	\$492	\$1.89
Pristipomoides/Etelis	3	\$10	\$3.00
Yelloweye snapper	25	\$51	\$2.02
Pink snapper (opakapaka)	88	\$145	\$1.65 *
Blue-lined gindai	6	\$18	\$3.00
Flower snapper (gindai)	9	\$27	\$3.00
Yellowtail snapper	2	\$6	\$3.00
Smalltooth jobfish (lehi)	32	\$86	\$2.71
Longtail snapper (onaga)	83	\$249	\$3.00 *
Squirrel snapper (ehu)	7	\$21	\$3.00
Black snapper	19	\$37	\$2.00
Stone's snapper	13	\$39	\$3.00
Kusakar's snapper	4	\$12	\$3.00
Longnose emperor	32	\$61	\$1.87
Ambon emperor	316	\$632	\$2.00
Redgill emperor	159	\$319	\$2.00
Oilfish	30	\$30	\$1.00
Pomfret	17	\$44	\$2.50
Surgeonfishes/tangs	389	\$757	\$1.95 *
Unicornfishes (misc)	105	\$204	\$1.94 *
Squirrelfish	54	\$109	\$2.00
Parrotfishes (misc)	737	\$1,476	\$2.00 *
Wrasses (misc)	11	\$23	\$2.00
Inshore groupers	106	\$196	\$1.86 *
Red snapper	23	\$40	\$1.70
Mahimahi	1,185	\$2,265	\$1.91
Swordfish	884	\$1,729	\$1.96 *
Blue marlin	270	\$440	\$1.63 *
Rainbow runner	365	\$699	\$1.91
Wahoo	47,875	\$47,023	\$0.98
Skipjack tuna	26,770	\$17,021	\$0.64
Dogtooth tuna	59	\$103	\$1.75

Table A-11 (Cont.)
American Samoa October 2004 Estimated Commercial Landings

Species	Pounds	Value	\$/Lb
Albacore	380,454	\$392,372	\$1.03
Yellowfin tuna	89,071	\$80,173	\$0.90
Bigeye tuna	34,883	\$38,424	\$1.10
Moonfish	208	\$258	\$1.24
Spiny lobster	48	\$139	\$2.90 *
TOTAL	586,247	\$588,851	\$1.00

* Data replaced or modified by Actual Commercial Landings Data

Table A-12
American Samoa November 2004 Estimated Commercial Landings

Species	Pounds	Value	Price/Lb
Miscellaneous	27	\$51	\$1.85
Black jack	102	\$231	\$2.27
Blue kingfish trevally	29	\$55	\$1.85
Barracudas	293	\$573	\$1.96
Bigeye barracuda	3	\$5	\$1.80
Groupers (misc)	57	\$100	\$1.76
White-edged lyretail	41	\$75	\$1.85
Spotted grouper	74	\$145	\$1.96
Blue-lined snapper	172	\$345	\$2.00 *
Rufous snapper	35	\$70	\$2.00
Paddletail snapper	157	\$305	\$1.94
Gray jobfish	221	\$365	\$1.65
Pristipomoides/Etelis	163	\$490	\$3.00
Yelloweye snapper	21	\$38	\$1.84
Pink snapper (opakapaka)	93	\$154	\$1.65 *
Yellowtail snapper	25	\$50	\$2.00
Smalltooth jobfish (lehi)	117	\$211	\$1.80
Longtail snapper (onaga)	387	\$967	\$2.50
Squirrel snapper (ehu)	31	\$74	\$2.43
Longnose emperor	98	\$183	\$1.87
Ambon emperor	85	\$160	\$1.88
Surgeonfishes/tangs	357	\$691	\$1.94 *
Unicornfishes (misc)	86	\$165	\$1.91 *
Squirrelfish	23	\$46	\$2.00 *
Parrotfishes (misc)	435	\$846	\$1.95 *
Inshore groupers	116	\$212	\$1.83 *
Inshore snappers	3	\$5	\$2.00
Red snapper	17	\$30	\$1.70
Mahimahi	714	\$1,428	\$2.00 *
Swordfish	896	\$2,688	\$3.00 *
Black marlin	120	\$120	\$1.00
Sailfish	124	\$186	\$1.50 *
Wahoo	56,340	\$52,336	\$0.93
Skipjack tuna	29,554	\$18,225	\$0.62
Dogtooth tuna	62	\$109	\$1.75
Albacore	476,032	\$490,584	\$1.03
Yellowfin tuna	61,628	\$55,933	\$0.91
Bigeye tuna	23,144	\$25,459	\$1.10
Moonfish	285	\$352	\$1.24
Spiny lobster	22	\$66	\$3.00 *
TOTAL	652,189	\$654,126	\$1.00

* Data replaced or modified by Actual Commercial Landings Data

Table A-13
American Samoa December 2004 Estimated Commercial Landings

Species	Pounds	Value	Price/Lb
Miscellaneous	13	\$25	\$1.85
Black jack	49	\$112	\$2.27
Blue kingfish trevally	14	\$26	\$1.85
Barracudas	227	\$447	\$1.97
Groupers (misc)	28	\$49	\$1.76
White-edged lyretail	19	\$36	\$1.85
Spotted grouper	36	\$70	\$1.96
Blue-lined snapper	21	\$42	\$2.00
Rufous snapper	11	\$21	\$2.00
Paddletail snapper	301	\$702	\$2.33 *
Gray jobfish	107	\$177	\$1.65
Pristipomoides/Etelis	79	\$237	\$3.00
Yelloweye snapper	10	\$19	\$1.84
Pink snapper (opakapaka)	111	\$183	\$1.65 *
Yellowtail snapper	12	\$24	\$2.00
Smalltooth jobfish (lehi)	57	\$102	\$1.80
Longtail snapper (onaga)	166	\$415	\$2.50
Longnose emperor	47	\$89	\$1.87
Ambon emperor	40	\$75	\$1.88
Surgeonfishes/tangs	235	\$453	\$1.93 *
Unicornfishes (misc)	53	\$96	\$1.80 *
Squirrelfish	16	\$32	\$2.00 *
Parrotfishes (misc)	171	\$314	\$1.84 *
Inshore groupers	30	\$50	\$1.65 *
Inshore snappers	1	\$3	\$2.00
Mahimahi	1,398	\$2,796	\$2.00 *
Swordfish	927	\$2,000	\$2.16 *
Blue marlin	790	\$962	\$1.22 *
Black marlin	1,423	\$1,423	\$1.00
Sailfish	546	\$497	\$0.91
Wahoo	39,005	\$37,417	\$0.96
Skipjack tuna	27,893	\$17,241	\$0.62
Dogtooth tuna	30	\$53	\$1.75
Albacore	370,783	\$381,473	\$1.03
Yellowfin tuna	39,286	\$35,807	\$0.91
Bigeye tuna	15,159	\$16,791	\$1.11
Spiny lobster	40	\$400	\$10.0 *
Octopus	15	\$120	\$8.00 *
TOTAL	499,150	\$500,776	\$1.00

* Data replaced or modified by Actual Commercial Landings Data

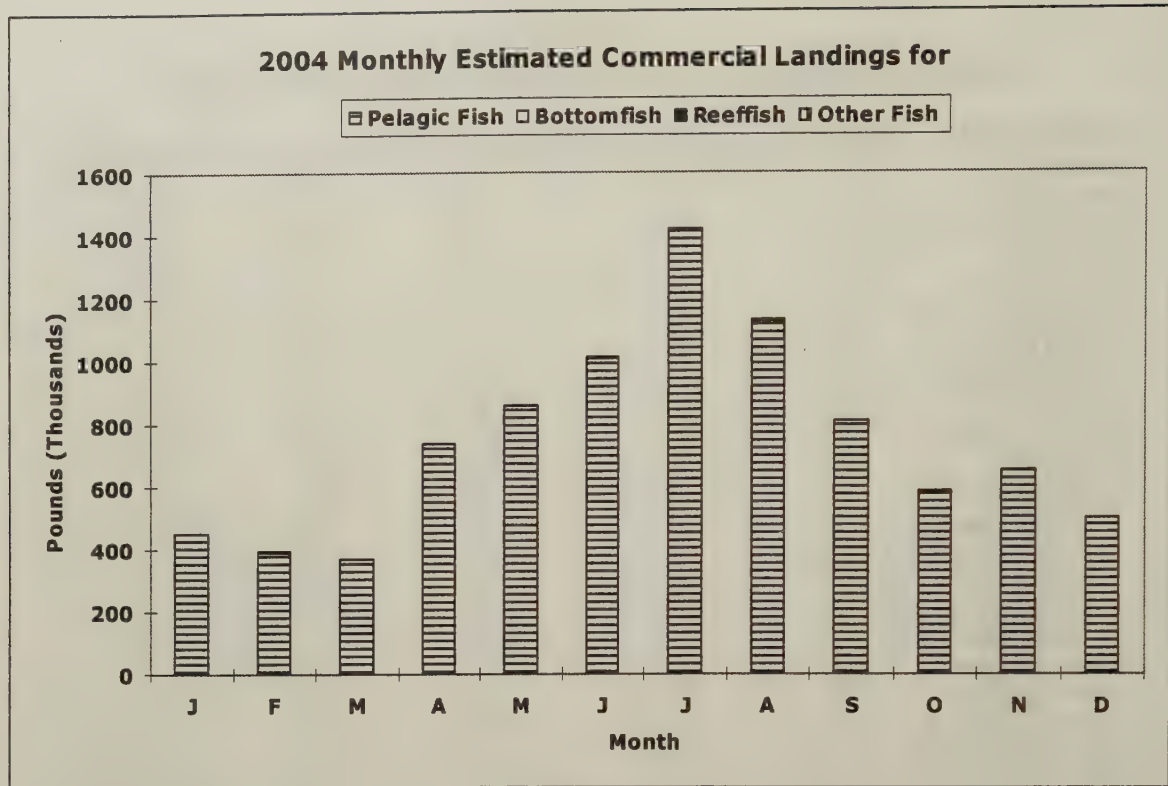


Figure A-1-1

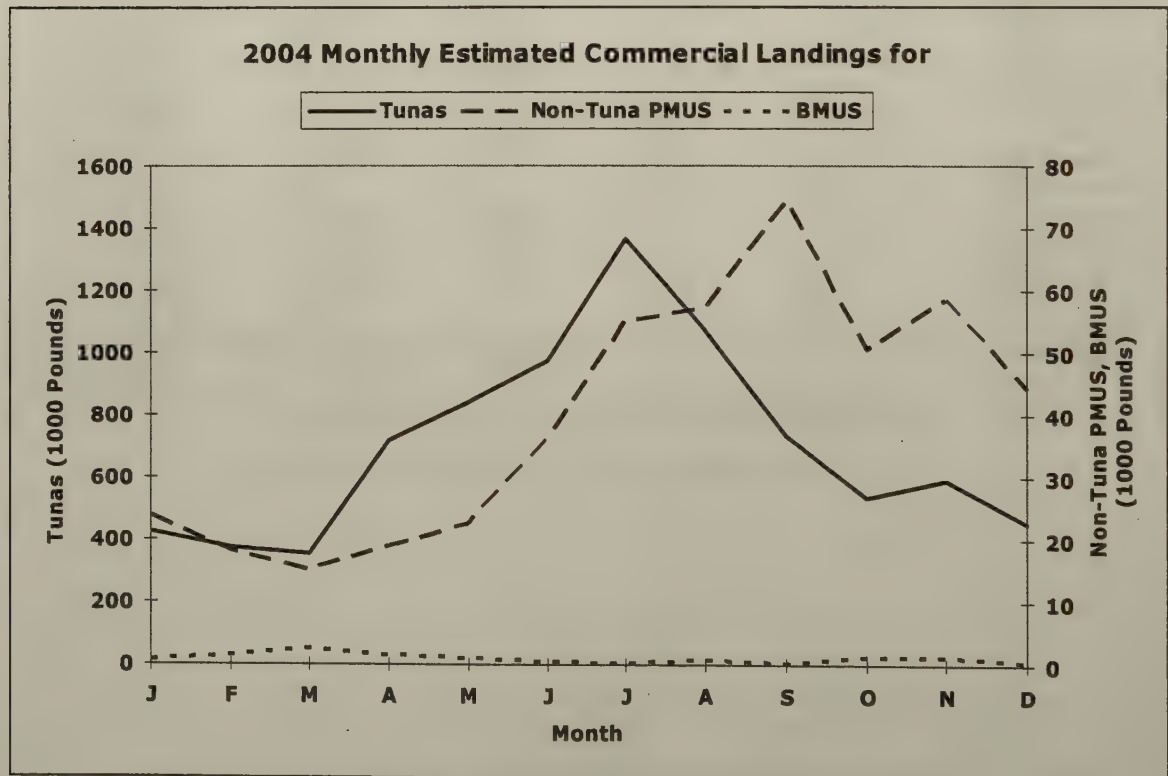


Figure A-1-2

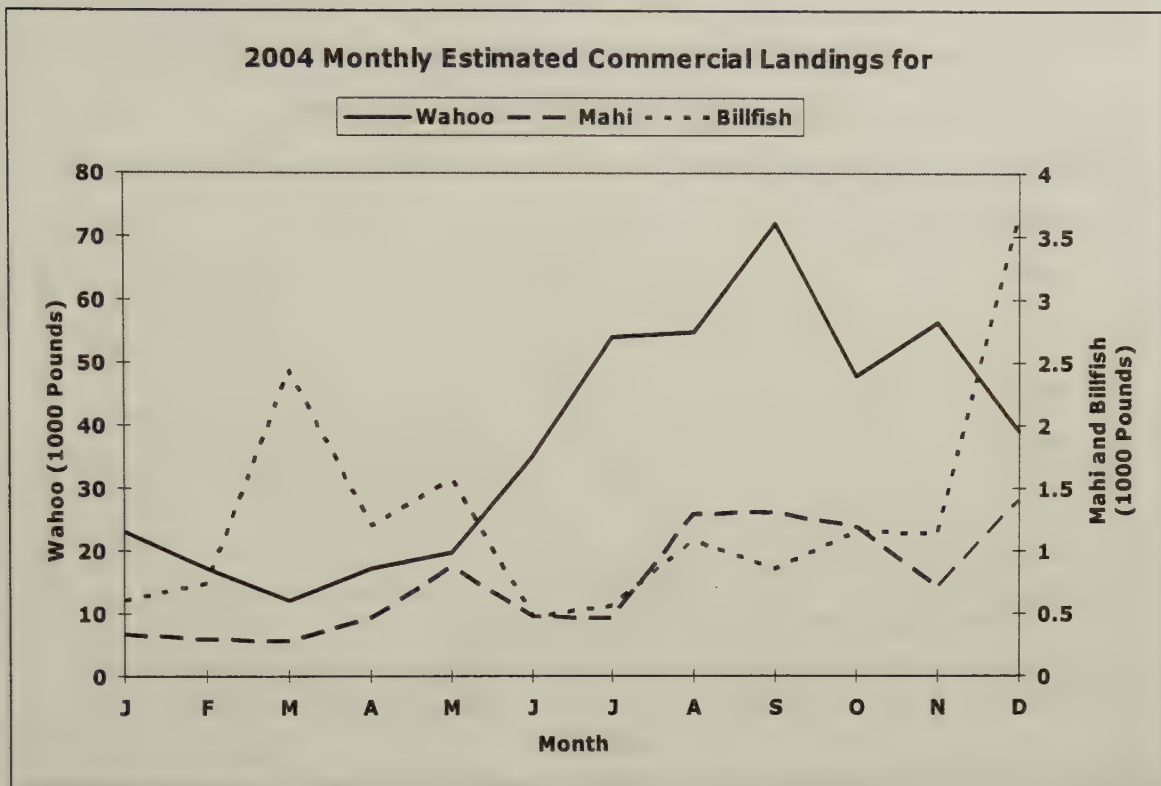


Figure A-1-3

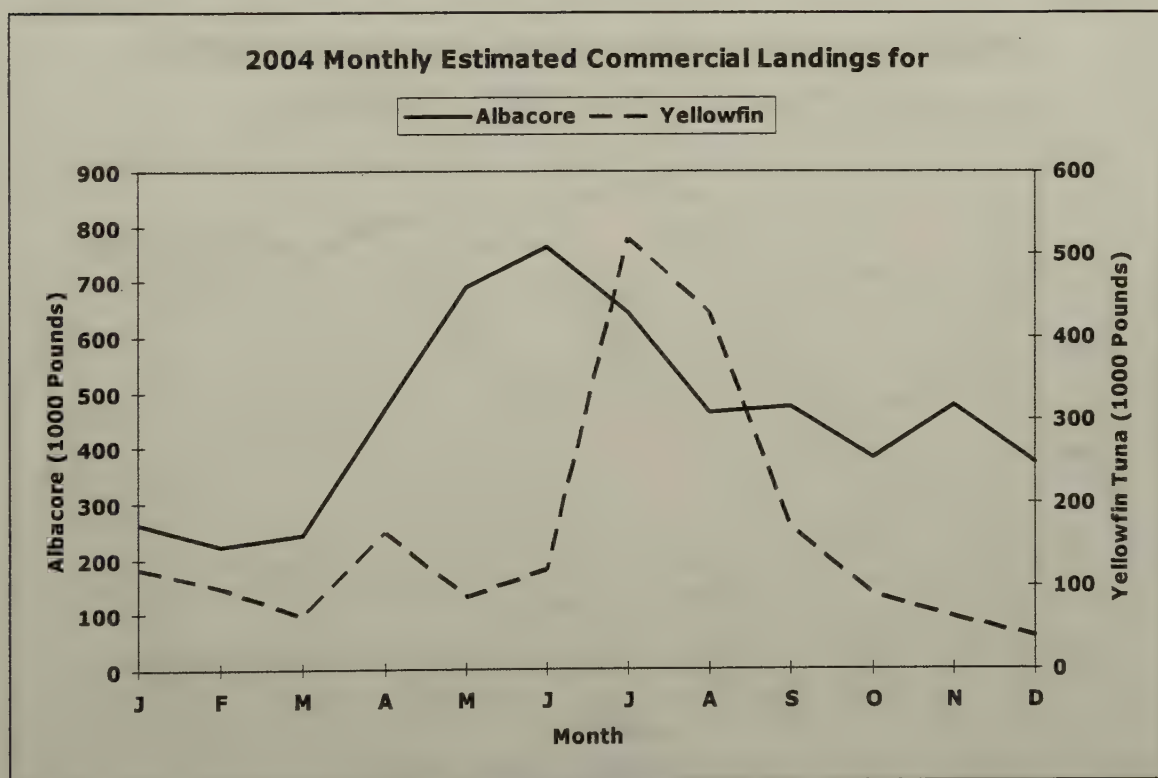


Figure A-1-4

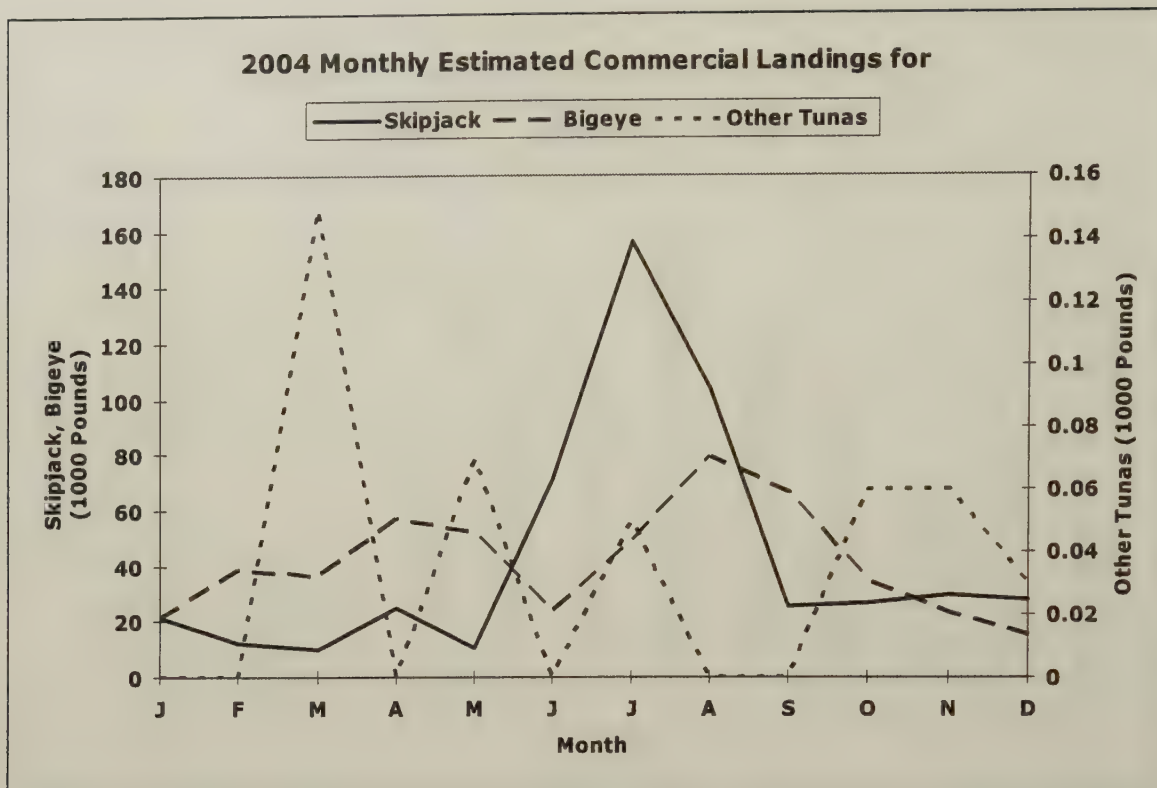


Figure A-1-5

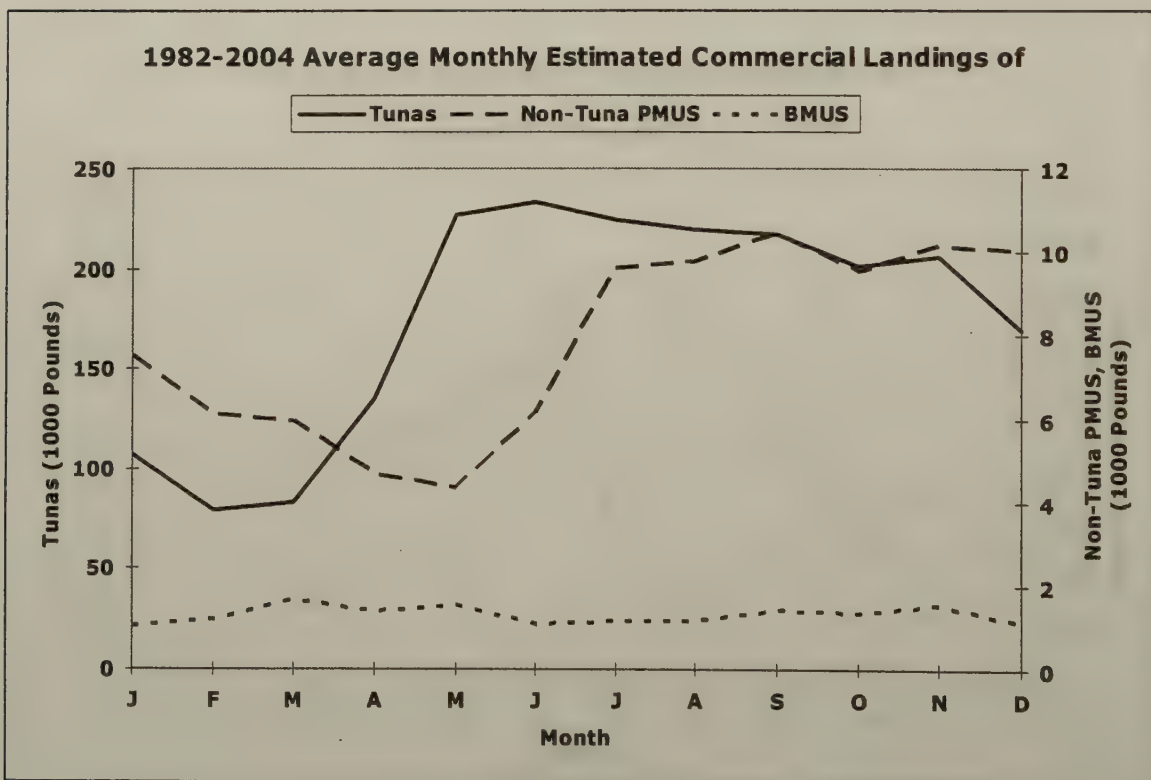


Figure A-2-1

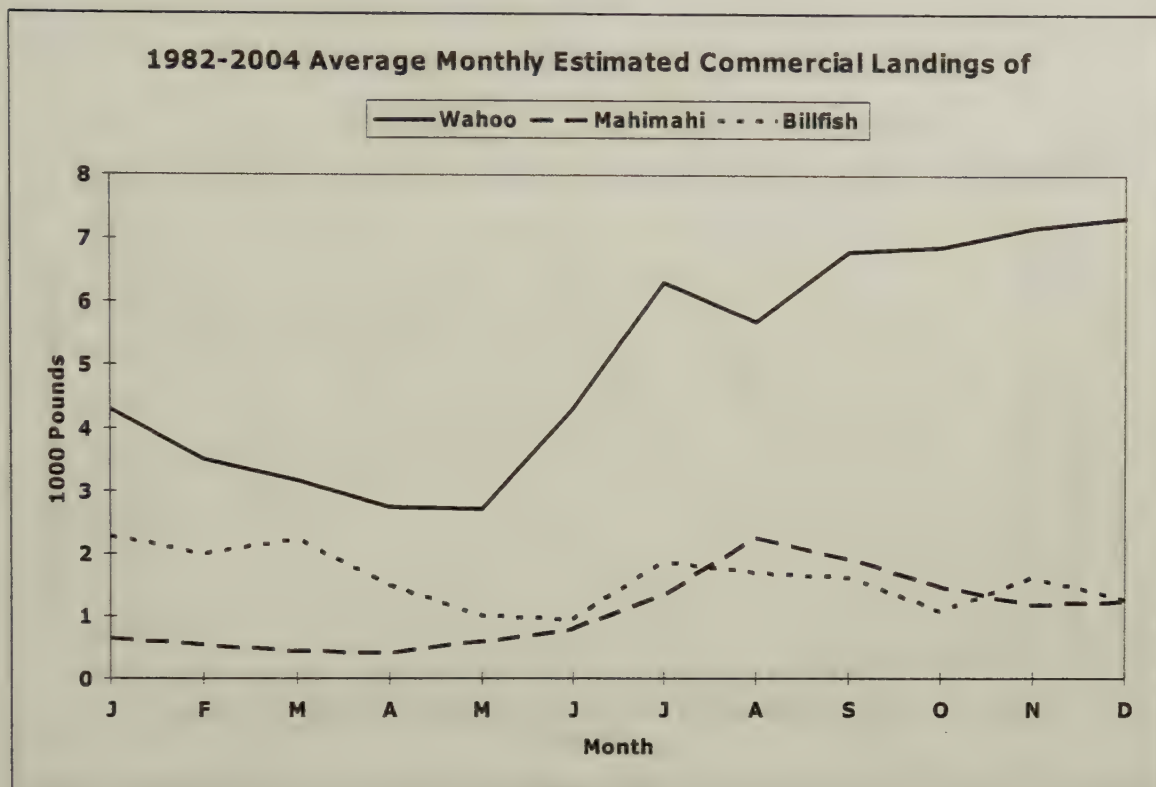


Figure A-2-2

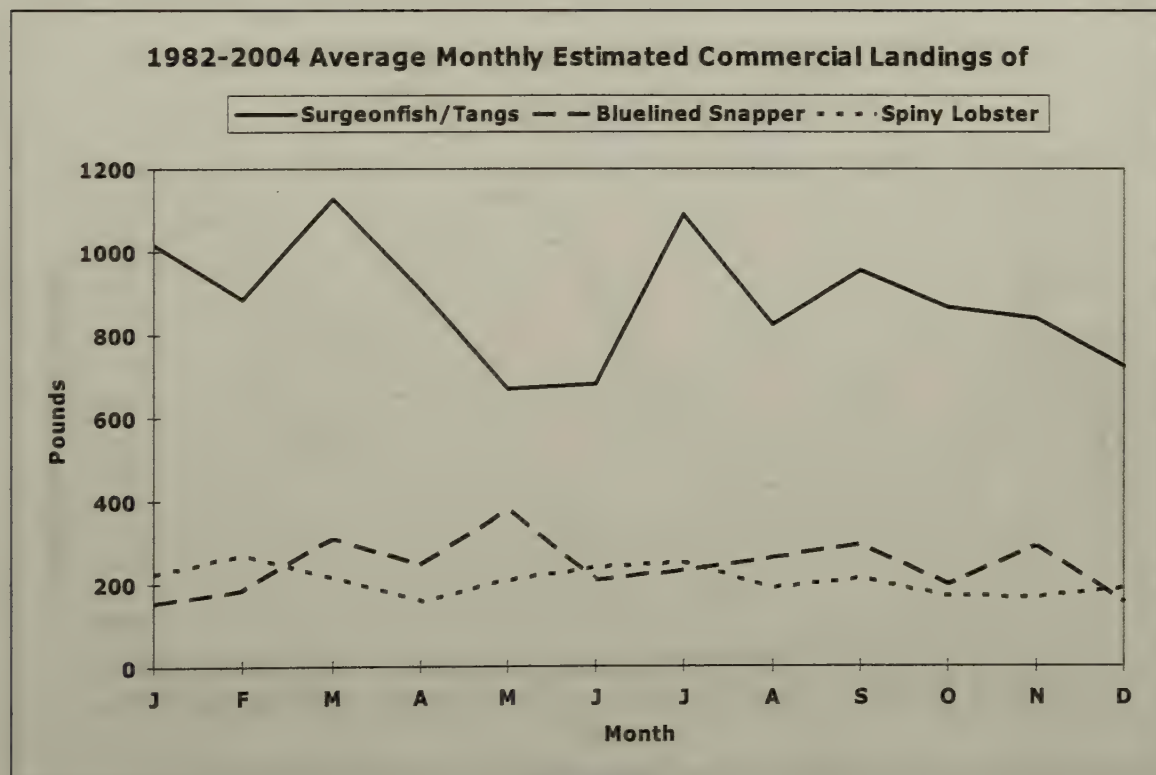


Figure A-2-3

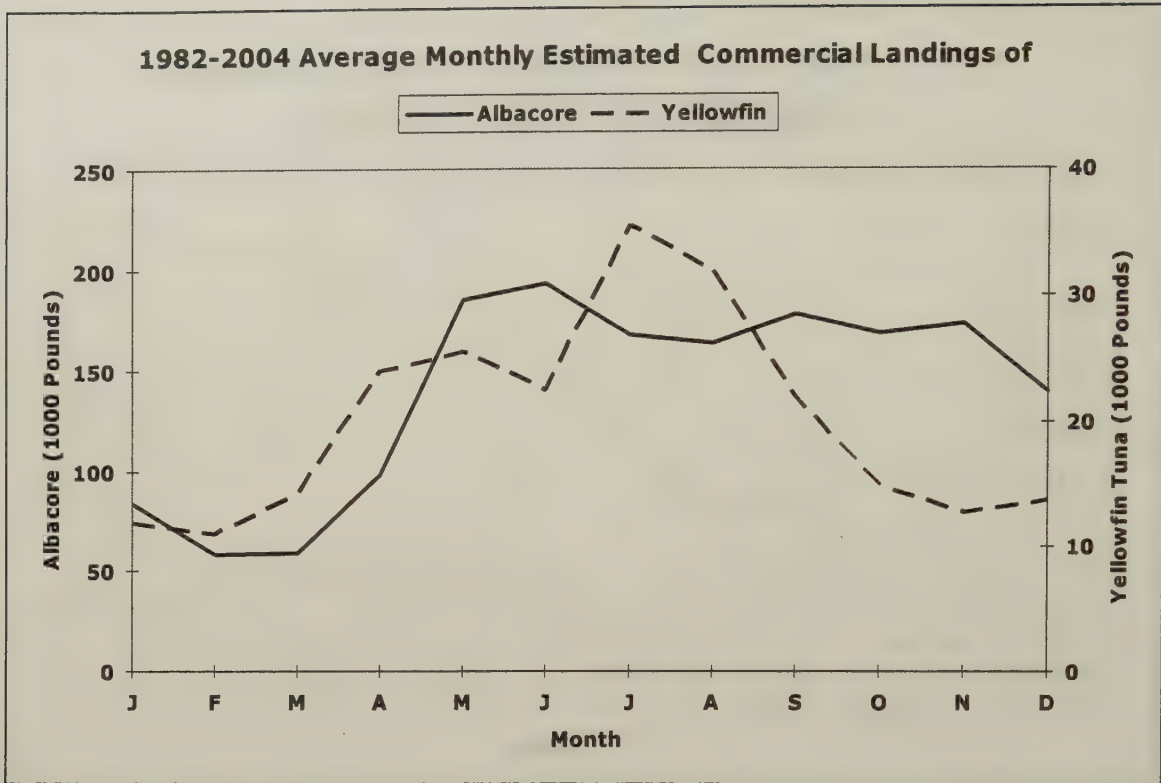


Figure A-2-4

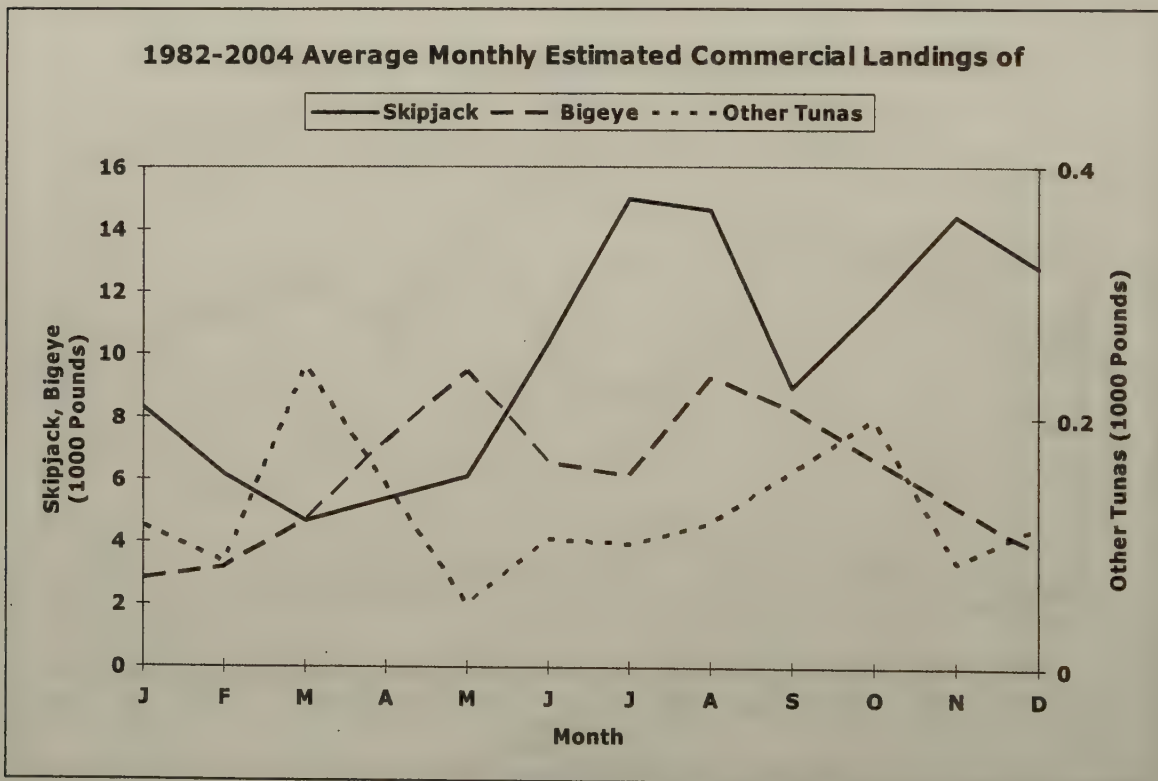


Figure A-2-5

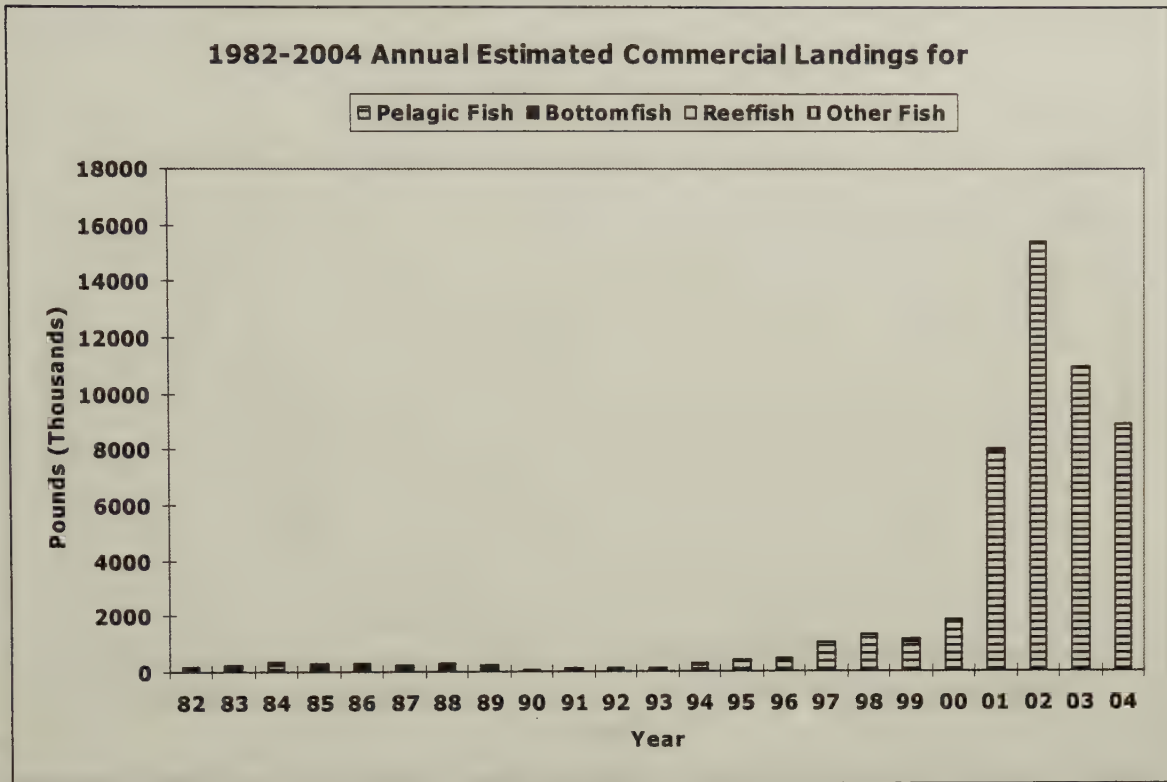


Figure A-3-1

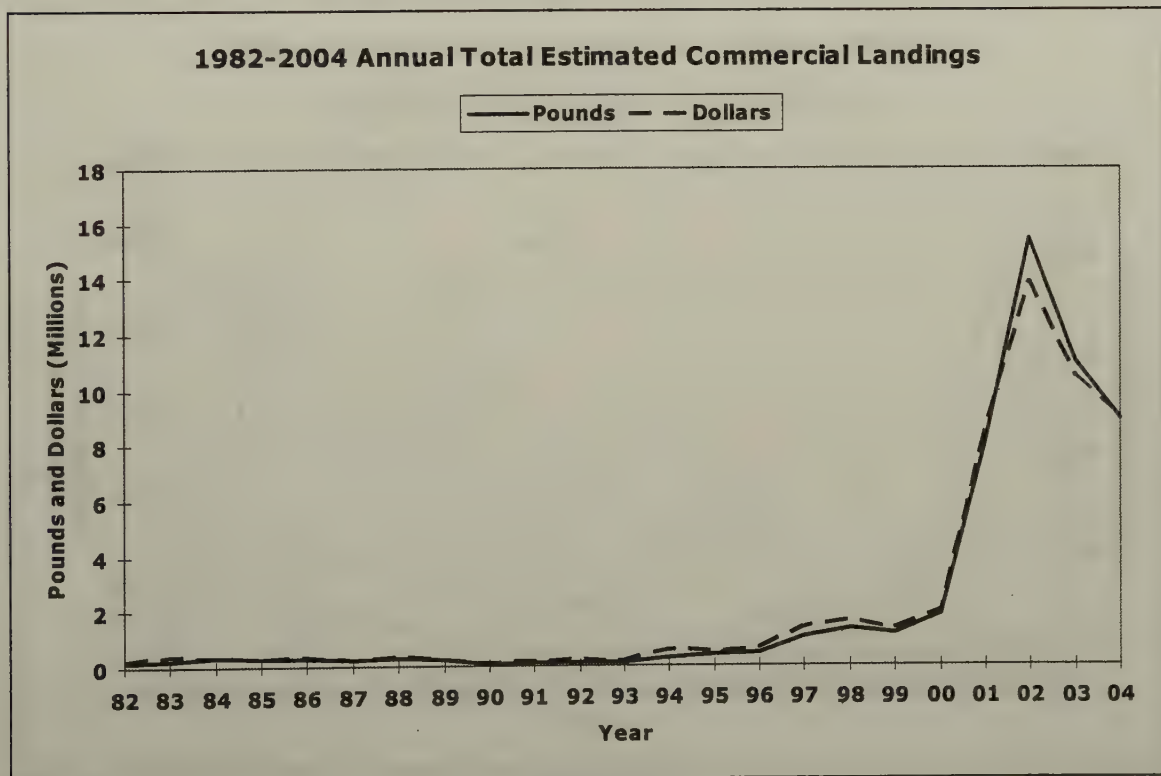


Figure A-3-2

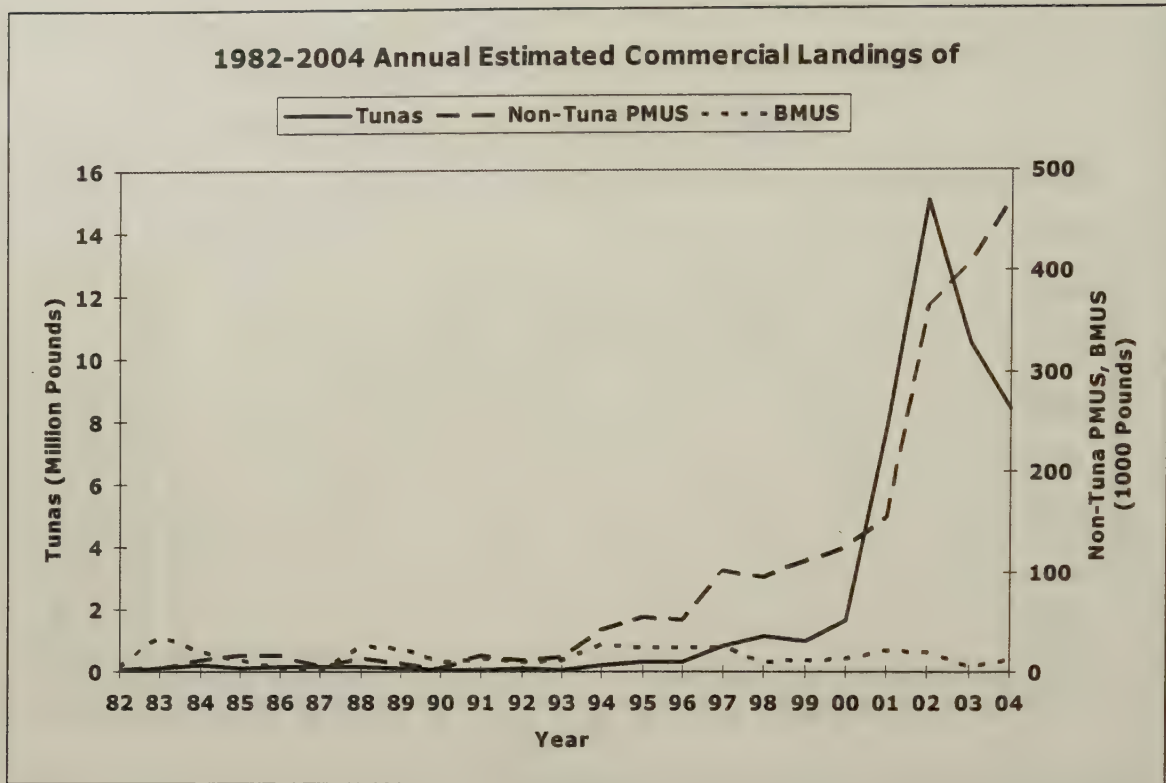


Figure A-3-3

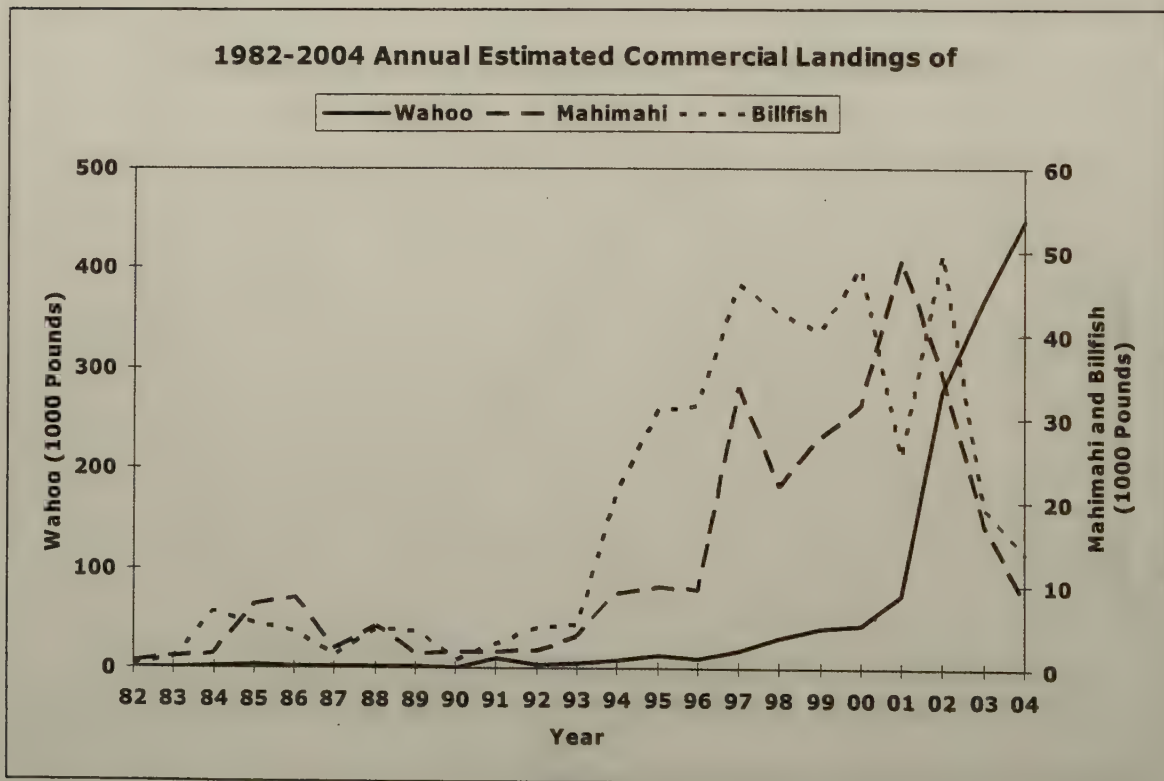


Figure A-3-4

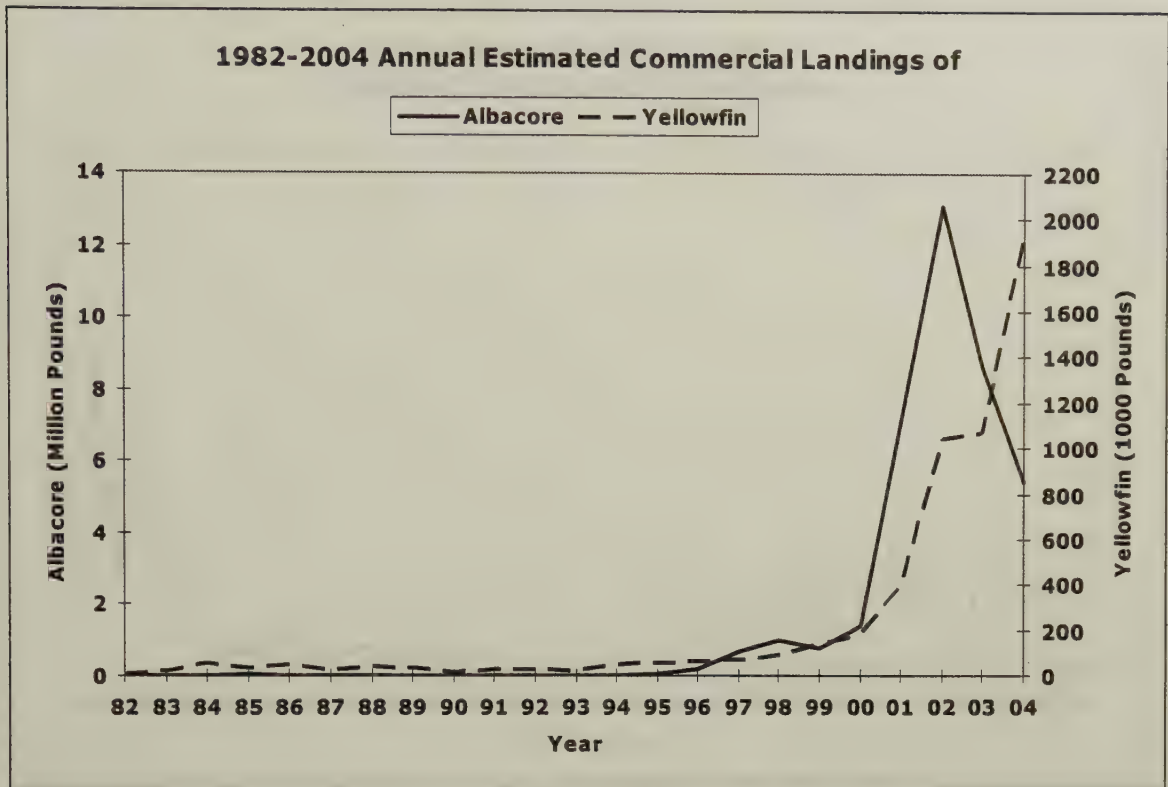


Figure A-3-5

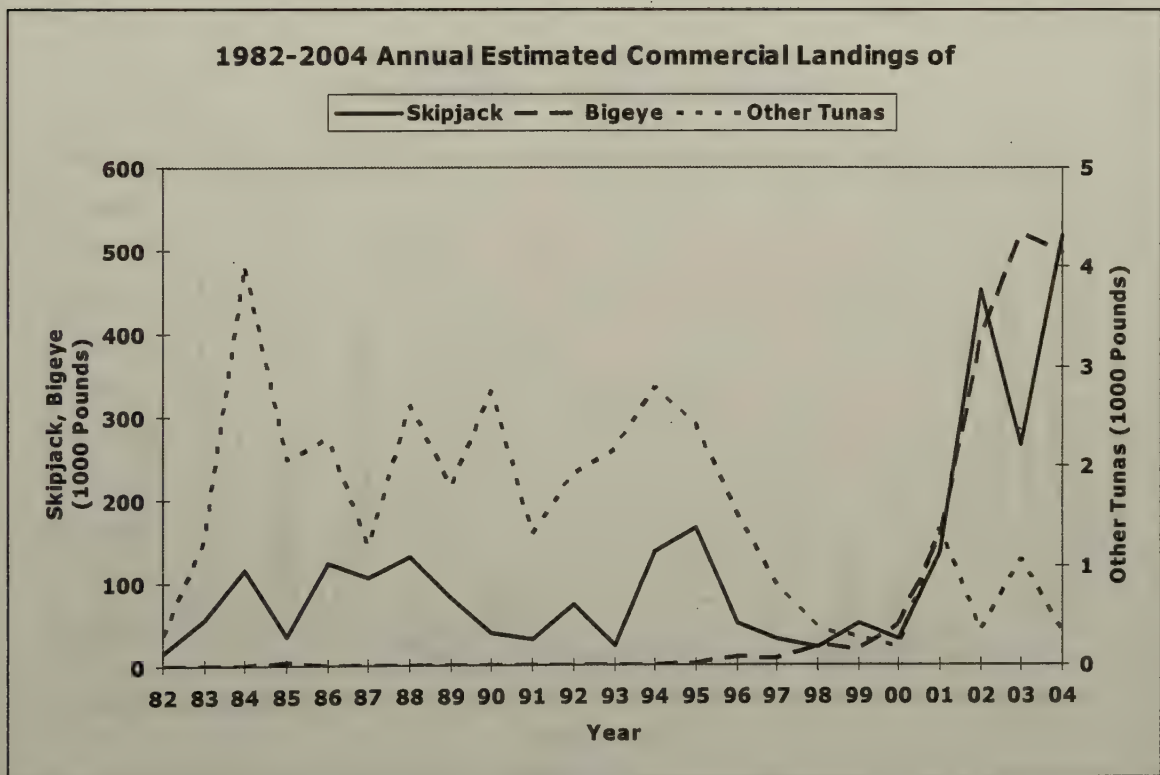


Figure A-3-6

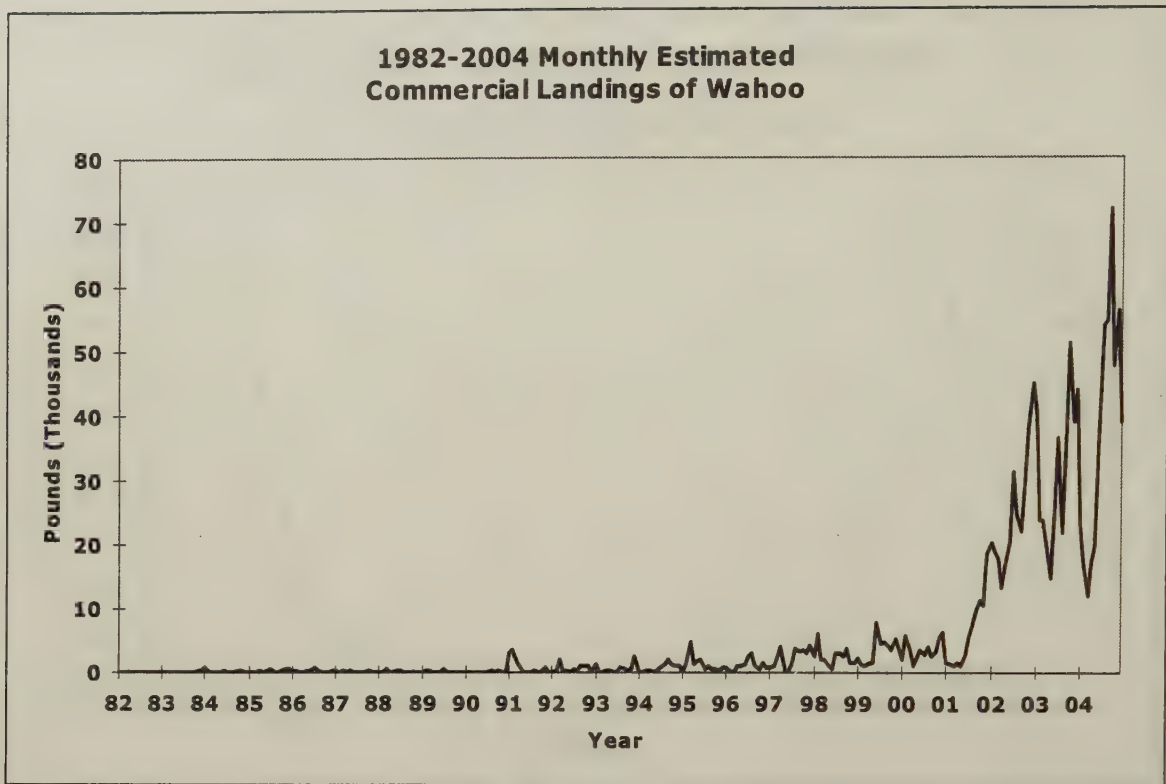


Figure A-4-1

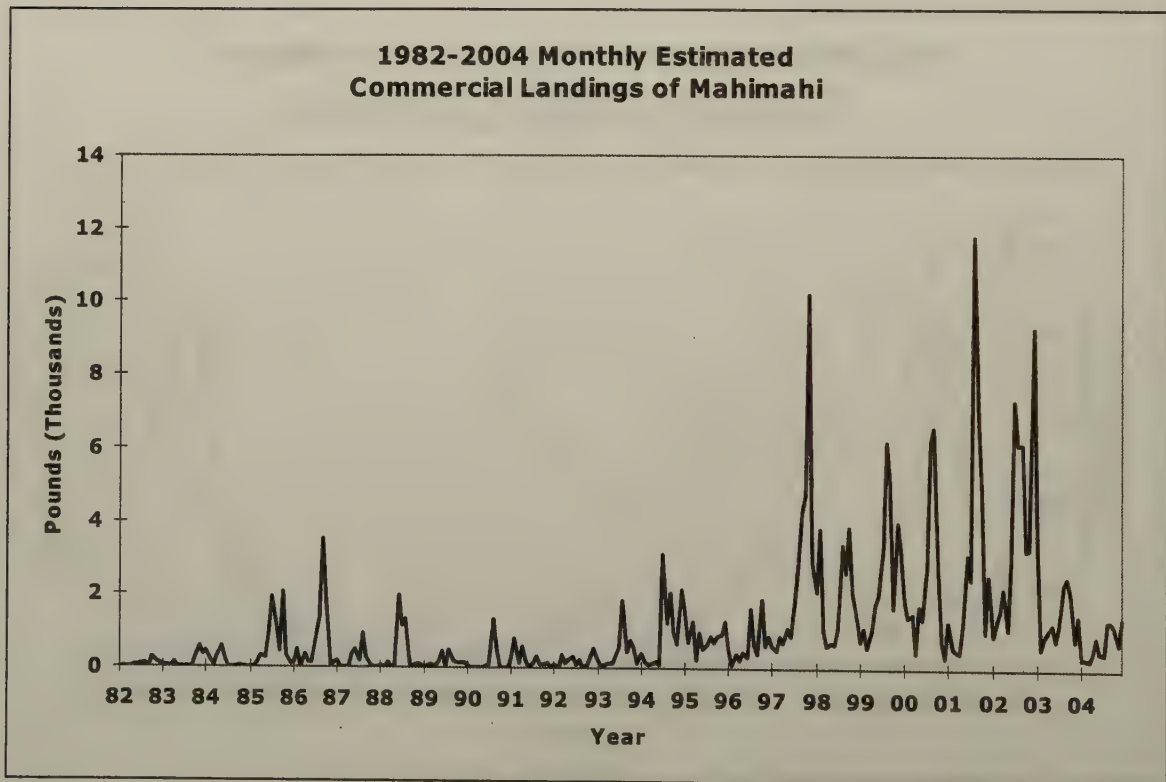


Figure A-4-2

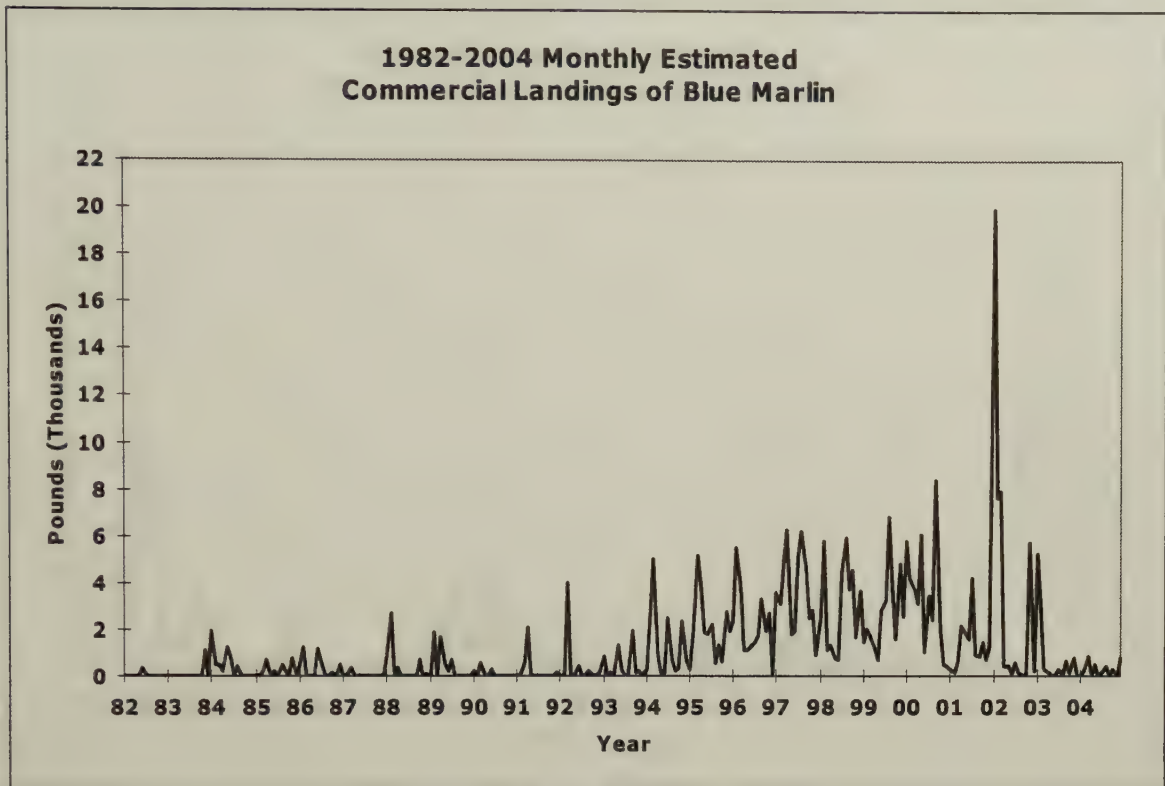


Figure A.4.3

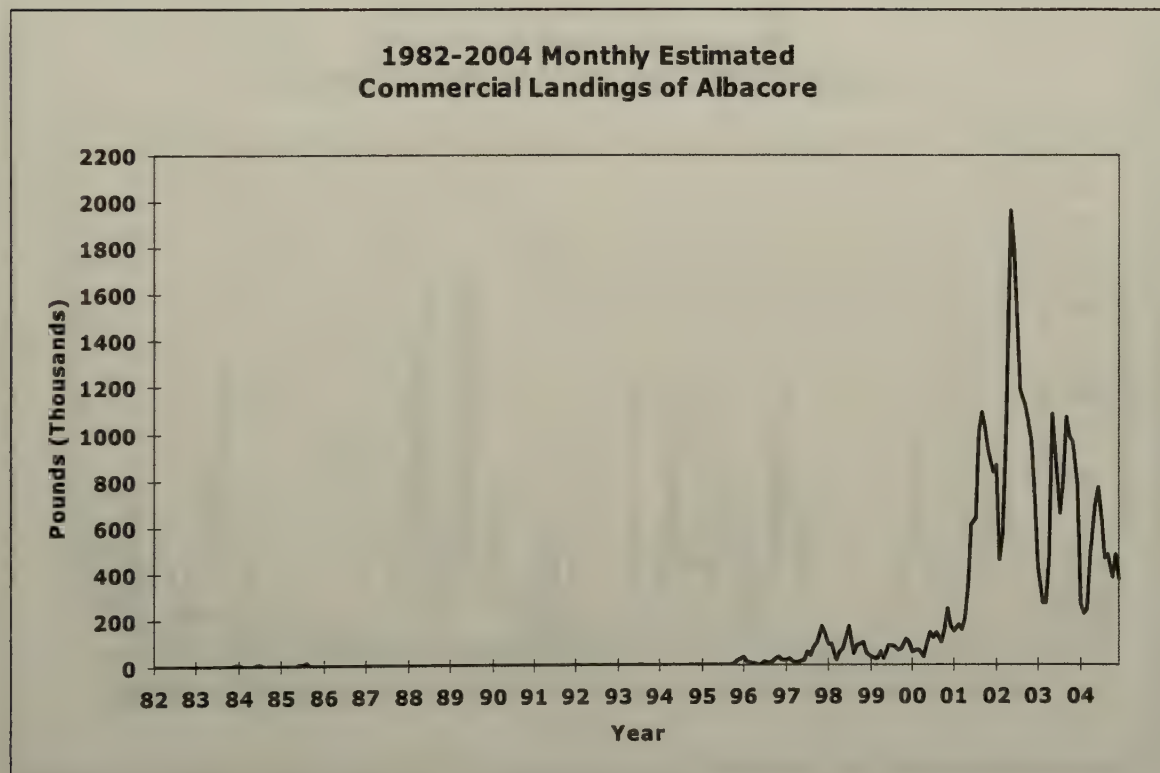


Figure A-4-4

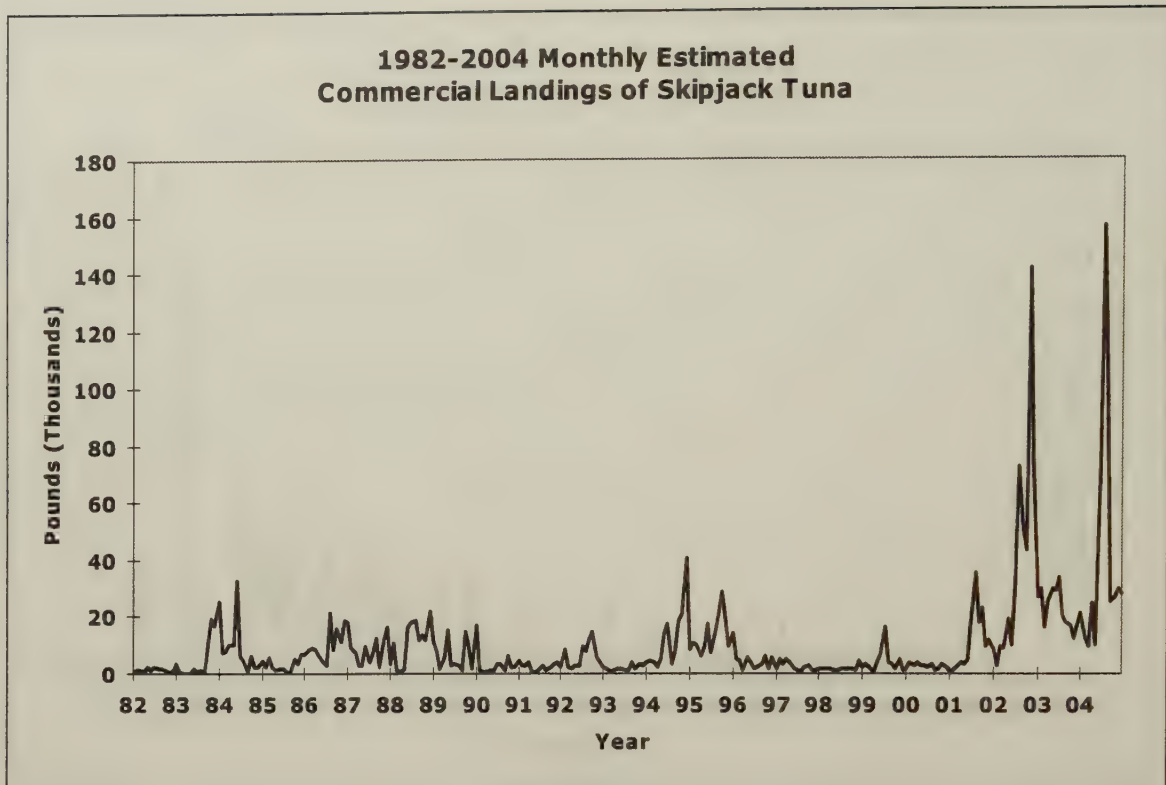


Figure A-4-5

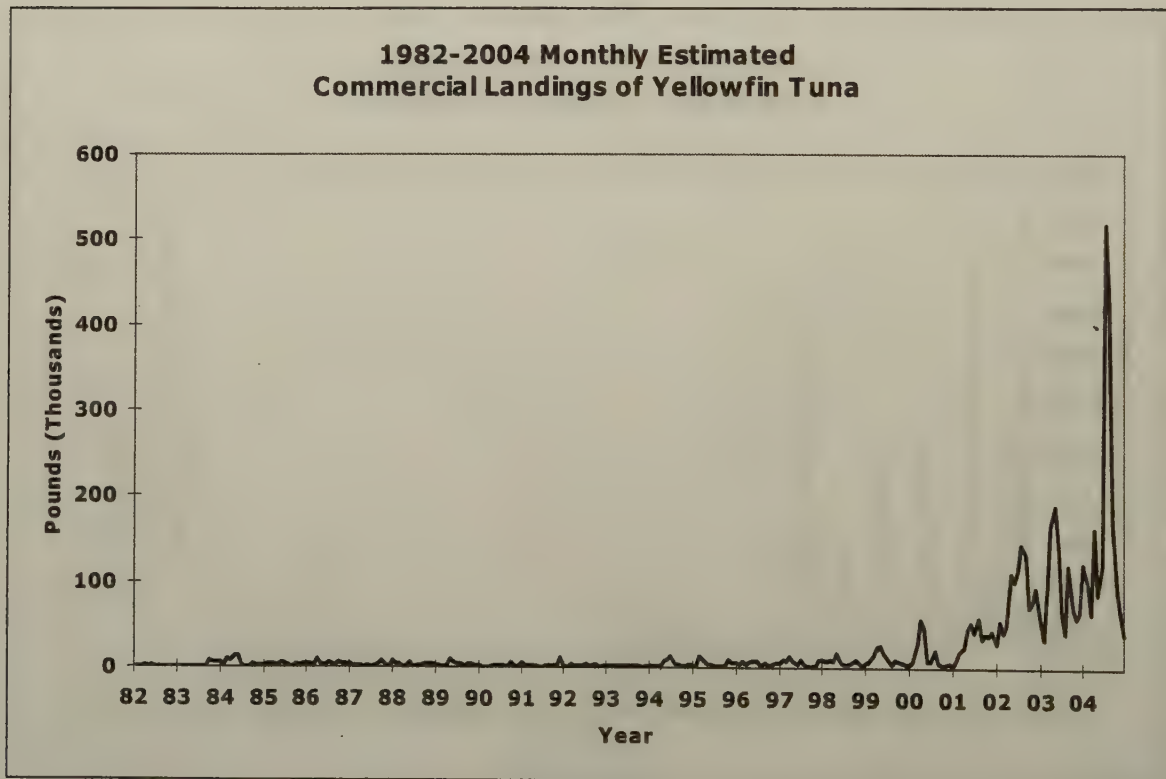


Figure A-4-6

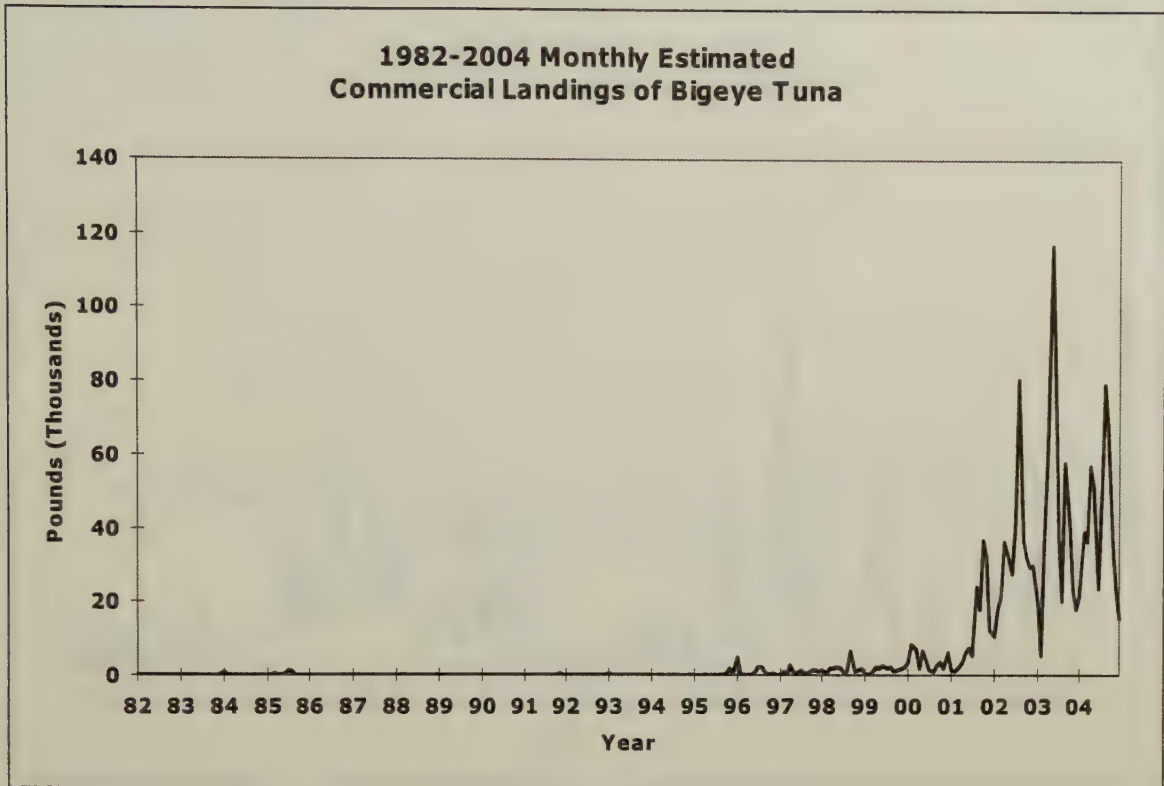


Figure A-4-7

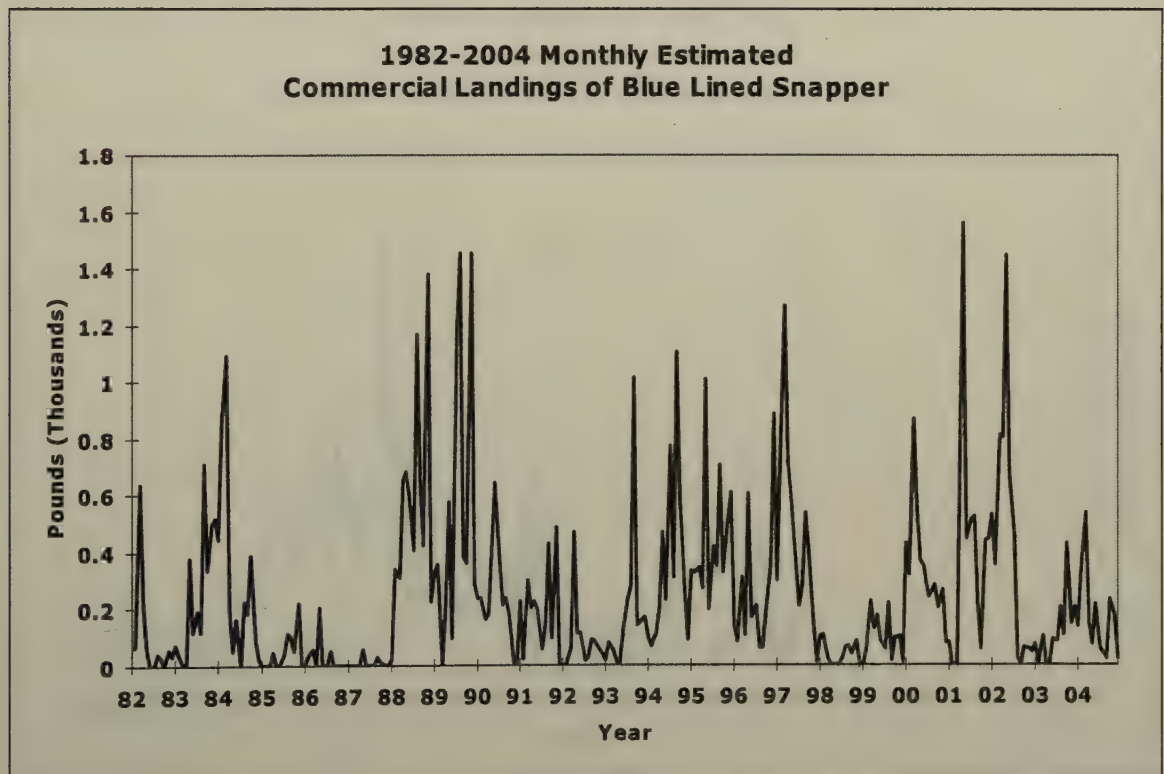


Figure A-4-8

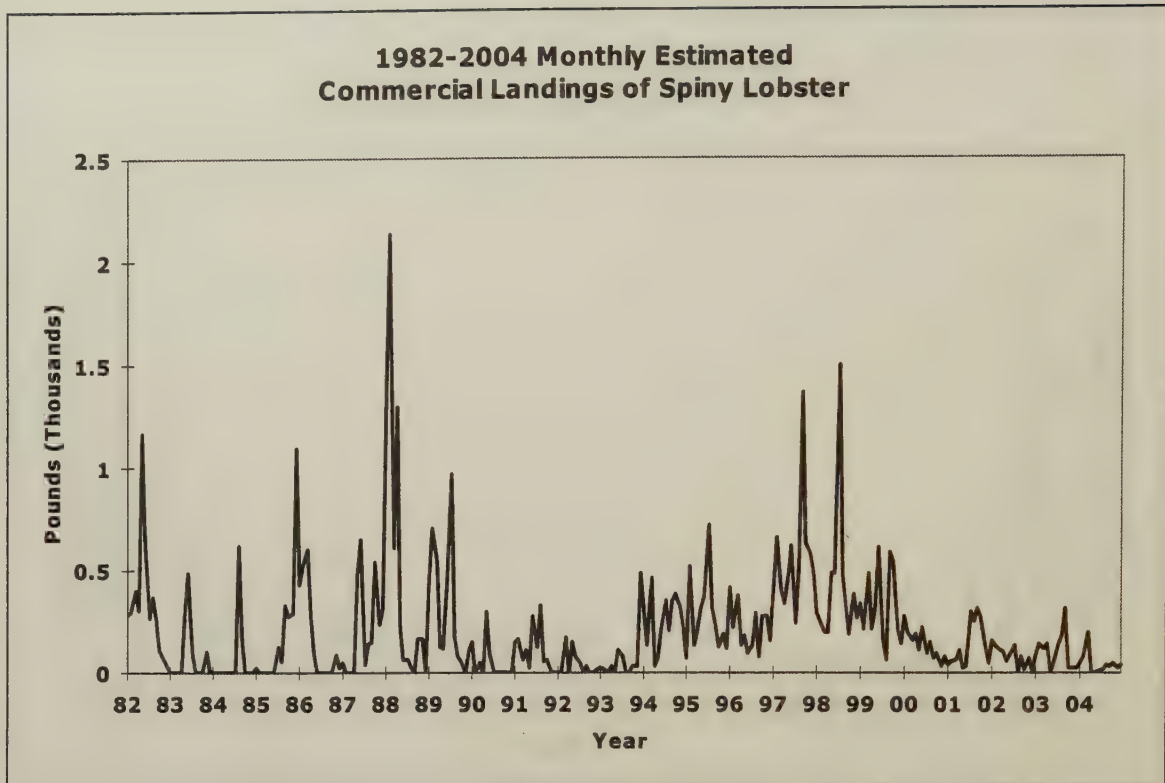


Figure A-4-9

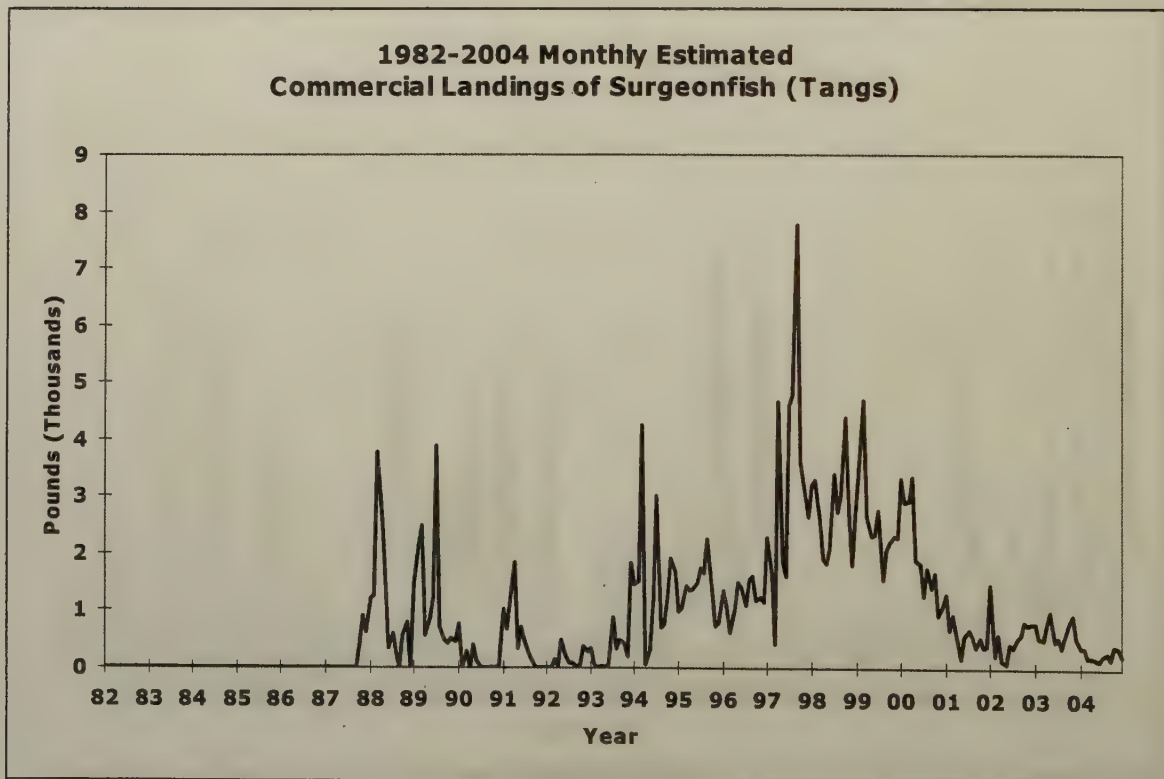


Figure A-4-10

COMMONWEALTH OF THE NORTHERN MARIANA ISLANDS
2004 FISHERY STATISTICS

Compiled by
Division of Fish and Wildlife
and the
Western Pacific Fishery Information Network

June 2006

CONTENTS

	Page
Introduction	B.1
Data Collecting System	B.2
Data Processing System	B.3
Data Reporting System	B.3
Tables	B.6
Figures	B.19

LIST OF CNMI SUMMARY TABLES

Table	Title	Page
B-1	2004 Estimated Commercial Landings	B.6
B-2	January 2004 Estimated Commercial Landings	B.7
B-3	February 2004 Estimated Commercial Landings	B.8
B-4	March 2004 Estimated Commercial Landings	B.9
B-5	April 2004 Estimated Commercial Landings	B.10
B-6	May 2004 Estimated Commercial Landings	B.11
B-7	June 2004 Estimated Commercial Landings	B.12
B-8	July 2004 Estimated Commercial Landings	B.13
B-9	August 2004 Estimated Commercial Landings	B.14
B-10	September 2004 Estimated Commercial Landings	B.15
B-11	October 2004 Estimated Commercial Landings	B.16
B-12	November 2004 Estimated Commercial Landings	B.17
B-13	December 2004 Estimated Commercial Landings	B.18

LIST OF CNMI FIGURES

Figure	Title	Page
B-1-1	2004 Monthly Estimated Commercial Landings of Pelagic, Bottom, Reef, and Other Fish	B.19
B-1.2	2004 Monthly Estimated Commercial Landings of Tunas, PMUS, and BMUS	B.19
B-1-3	2004 Monthly Estimated Commercial Landings of Mahimahi, Wahoo, and Billfish	B.20
B-1-4	2004 Monthly Estimated Commercial Landings of Skipjack, Yellowfin, and Other Tunas	B.20
B-1-5	2004 Monthly Estimated Commercial Landings of Bigeye Scad, Emperors, and Onaga	B.21
B-2-1	1981-2004 Average Monthly Estimated Commercial Landings of Tunas, PMUS, and BMUS	B.21
B-2-2	1981-2004 Average Monthly Estimated Commercial Landings of Mahimahi, Wahoo, and Billfish	B.22
B-2-3	1981-2004 Average Monthly Estimated Commercial Landings of Skipjack, Yellowfin, and Other Tunas	B.22
B-2-4	1981-2004 Average Monthly Estimated Commercial Landings of Bigeye Scad, Emperors, and Onaga	B.23
B-2-5	1981-2004 Average Monthly Estimated Commercial Landings of Parrotfish, Spiny Lobster, and Rabbitfish	B.23
B-3-1	1981-2004 Annual Trend of Fisheries Categories: Estimated Commercial Landings of Pelagic, Bottom, Reef, and Other Fish	B.24
B-3-2	1981-2004 Annual Total Estimated Commercial Landings (Pounds and Dollars)	B.24
B-3-3	1981-2004 Annual Estimated Commercial Landings of Tunas, PMUS, and BMUS	B.25
B-3-4	1981-2004 Annual Estimated Commercial Landings of Mahimahi, Wahoo, and Billfish	B.25
B-3-5	1981-2004 Annual Estimated Commercial Landings of Skipjack, Yellowfin, and Other Tunas	B.26
B-3-6	1981-2004 Annual Estimated Commercial Landings of Bigeye Scad, Emperors, and Onaga	B.26
B-3-7	1981-2004 Annual Estimated Commercial Landings of Parrotfish, Spiny Lobster, and Rabbitfish	B.27

LIST OF CNMI FIGURES (cont.)

Figure	Title	Page
B-4-1	1981-2004 Monthly Estimated Commercial Landings of Wahoo	B.27
B-4-2	1981-2004 Monthly Estimated Commercial Landings of Mahimahi	B.28
B-4-3	1981-2004 Monthly Estimated Commercial Landings of Parrotfish	B.28
B-4-4	1981-2004 Monthly Estimated Commercial Landings of Dogtooth Tuna	B.29
B-4-5	1981-2004 Monthly Estimated Commercial Landings of Skipjack Tuna	B.29
B-4-6	1981-2004 Monthly Estimated Commercial Landings of Yellowfin Tuna	B.30
B-4-7	1981-2004 Monthly Estimated Commercial Landings of Emperors (Misc.)	B.30
B-4-8	1981-2004 Monthly Estimated Commercial Landings of Bigeye Scad	B.31
B-4-9	1981-2004 Monthly Estimated Commercial Landings of Onaga	B.31
B-4-10	1981-2004 Monthly Estimated Commercial Landings of Spiny Lobster	B.32
B-4-11	1981-2004 Monthly Estimated Commercial Landings of Rabbitfish	B.32

COMMONWEALTH OF THE NORTHERN MARIANA ISLANDS

2004 FISHERY STATISTICS

INTRODUCTION

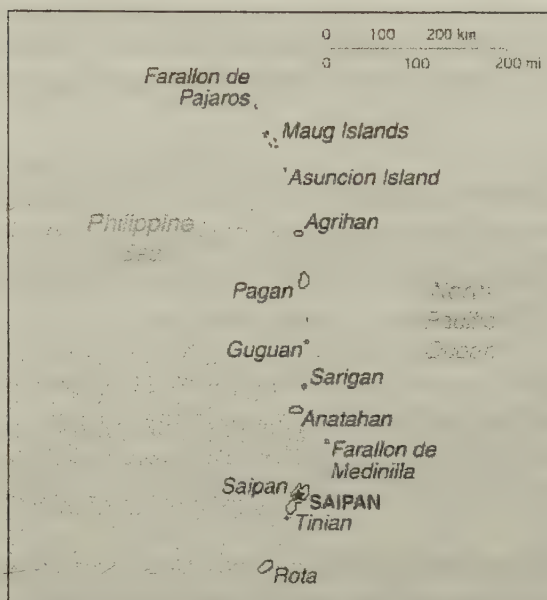
Location: 14° to 21°N latitude, 145°E longitude

Main Islands: Saipan, Rota, Tinian

Population: about 82,500; (*The World Factbook*, 2006)

Economy: tourism, agriculture, garment production

The chief domestic commercial fishery of the Commonwealth of the Northern Mariana Islands (CNMI) is a small boat, 1-day troll fishery, and most of the boats are 12- to 24-foot outboard-powered, runabout-type vessels. However, a few larger boats are used mainly for bottomfish fishing around the islands north of Saipan, and a small charter fleet also exists.



CNMI

Source: <<http://www.cia.gov/cia/publications/factbook/geos/cq.html>>
The World Factbook

During 2004, 54 vessels were registered as full-time commercial fishing boats, and 28 were part-time. Also, 13 vessels were registered as “charter” for their primary use, and 360 boats were non-fishing or recreational.

Trolling is the most common fishing method, but bottomfishing and reef fishing are also popular. Reef fish make up a significant portion of the total commercial catch and are an important component of the local diet. In recent years, several larger boats started fishing more intensively for bottomfish around the islands north of Saipan. While the vast majority of the domestic catch is consumed locally, there have been some exports to Guam, Hawaii, and Japan.

In 1982 WPacFIN significantly improved data collecting and processing systems by providing computer hardware, software, and training. Since then numerous system upgrades and replacements have been implemented to keep up with changing technologies and the increasing demands for improved fisheries statistics.

DATA COLLECTING SYSTEM

The Division of Fish and Wildlife (DFW) has been collecting fishery statistics on the commercial fishing fleet of Saipan since the mid-1970s. With the assistance of the NMFS WPacFIN program, DFW also expanded its fisheries monitoring programs to include Rota and Tinian, the other two major inhabited islands in the CNMI.

DFW's principal method of collecting domestic commercial fisheries data is a dealer invoicing system, sometimes referred to as a "trip ticket" system. The DFW provides numbered two-part invoices to all purchasers of fresh fishery products (including hotels, restaurants, stores, fish markets, and roadside vendors). Dealers then complete an invoice each time they purchase fish directly from fishermen; one copy goes to DFW and one copy goes to their records.

Some advantages of this data collection method are that it is relatively inexpensive to implement and maintain, is fairly easy to get complete coverage of the commercial fisheries, and DFW can provide feedback to dealers and fishermen to ensure data accuracy and continued cooperation.

There are some disadvantages: (1) dependency on non-DFW personnel to identify the catch and record the data; (2) restrictions on the types of data that can be collected; (3) required education and cooperation of all fish purchasers; and (4) limited recordings of fish actually sold to dealers. Therefore, a potentially important portion of the total landings is unrecorded.

Since 1982 DFW has tried to minimize these disadvantages in several ways: (1) maintain a close working relationship with dealers; (2) add new dealers to their list and educate them; and (3) implement a creel survey to help estimate total catch, including recreational and subsistence catch.

The current system collects data from dealers in Saipan, where DFW estimates over 90% of all CNMI commercial landings are made. The DFW also estimates that the proportion of total commercial landings that have been recorded in the Saipan database since 1983 is about 90%. Previous volumes of FSWP reported only recorded landings, but in recent volumes the data have been adjusted to represent 100% coverage and are referenced as "Estimated Commercial Landings" in the tables and charts.

Information collected from the fishermen includes the following:

- | | |
|-----------------------------|-------------------|
| • Date | • Weight (pounds) |
| • Buyer's Name (dealer) | • Price per Pound |
| • Seller's Name (fisherman) | • Value |
| • Species | • Invoice Number |

These data elements are collected for all purchases of fishery products; however, species identification is frequently made only to a group level, especially for reef fish.

DATA PROCESSING SYSTEM

At the beginning of each month, a DFW employee visits each of the dealers on Saipan to collect the previous month's invoices, to resolve problems, and to answer any questions the dealers may have. The invoices are then returned to the office for an initial visual edit during the coding process and entered into the Commercial Purchase System database. After the records are entered, reports are generated to help verify that all data were entered correctly. On a quarterly basis, copies of the database are sent to the Pacific Islands Fisheries Science Center, where the data are transferred to the central computer for additional verification before generating summary reports. These reports and databases are then ready for use by qualified WPacFIN participants.

DATA REPORTING SYSTEM

After all editing, adjustment, and quality control activities have been completed, monthly and annual summary reports by species are generated. Each monthly report contains a subtotal for the sum of all species for that month. Annual reports contain the total landings for each species and the total recorded landings for all species for the calendar year.

Please note that commercial landings data have been adjusted to reflect total coverage and are referenced as "Estimated Commercial Landings" in the charts and tables. Also, some of the charts in this volume are new or modified from earlier volumes.

To access the most up-to-date data and charts, please visit the WPacFIN Website at <http://www.pifsc.noaa.gov/wpacfin>.

The following species, species groups, and abbreviations are used in the tables and graphs of CNMI's data:

Note: Many of the species included in this report have been recategorized over the years. For example, the Magnuson Fishery Conservation and Management Act of 1976 was amended in 1992 to include tunas in the Pelagic Management Unit Species (PMUS) category. However, this FSWP volume will maintain the original species categorizations from previous volumes for comparative purposes. As such, tunas are kept in a separate category.

I. Pelagic Management Unit Species (PMUS)

Mahimahi (dolphin)
Marlin
Shortbill spearfish
Sailfish
Wahoo
Sharks

II. Bottomfish Management Unit Species (BMUS)

Jacks (unclassified, but excluding bigeye scad)
Amberjack
Bottomfish (unclassified)
Ehu (red snapper)
Gindai (flower snapper)
Grouper (unclassified)
Kalekale (pink snapper)
Lehi (silverjaw snapper)
Onaga (red or longtail snapper)
Opakapaka (pink snapper)
Uku (gray snapper)
Emperorfish

III. Billfish

Marlin (probably all blue marlin but could also include the rarely landed striped and black marlins)
Shortbill spearfish
Sailfish

IV. Tunas

Tunas (unclassified)
Skipjack tuna
Yellowfin tuna
Dogtooth tuna

V. Other Tuna

The above tunas excluding skipjack and yellowfin tunas

VI. Fisheries Categories

A. Pelagics

All PMUS and tuna species plus the following:
Troll fish (unclassified)
Barracuda
Rainbow runner

B. Bottomfish

Same as BMUS

C. Reef Fish

Reef fish (unclassified)

Giant wrasse

Rabbitfish (hitting, hitting feda, menahac, and sesjun)

Rudderfish

Squirrelfish

Parrotfish

Snapper

Surgeonfish

Unicornfish

Goatfish

D. Other

Miscellaneous

Mullet

Milkfish

Crabs (unclassified)

Lobster

Octopus

Turtle

Bigeye scad

Eels

Invertebrates (unclassified)

Coconut crab

Shrimp

Squid

Seaweeds

Imported

Table B-1
2004 Estimated Commercial Landings

Species	Pounds	Value	Price/Lb.
Bigeye scad	7,959	\$18,343	\$2.30
Jacks (misc)	477	\$1,216	\$2.55
Mullet	64	\$159	\$2.50
Blackjack	931	\$1,781	\$1.91
Giant trevally	91	\$250	\$2.75
Brassy trevally	27	\$55	\$2.00
Bottom fish	20,831	\$49,409	\$2.37
Sickle pomfret	559	\$1,408	\$2.52
Ehu (red snapper)	1,137	\$3,406	\$3.00
Gindai (flower snapper)	1,043	\$3,105	\$2.98
Grouper (misc)	1,073	\$3,172	\$2.96
Kalikali (yellowtail)	3,242	\$8,266	\$2.55
Onaga (red snapper)	3,160	\$12,148	\$3.84
Opakapaka (pink snapper)	849	\$2,586	\$3.05
Jobfish (uku)	1,194	\$2,252	\$1.89
Silvermouth (deep lehi)	737	\$1,882	\$2.55
Amberjack	488	\$957	\$1.96
Blueline snapper	102	\$331	\$3.25
Red snapper	204	\$407	\$2.00
Reef fish	54,682	\$140,180	\$2.56
Wrasse	136	\$477	\$3.50
Rabbitfish	3,916	\$12,688	\$3.24
Emperor (mafute/misc)	18,889	\$51,140	\$2.71
Squirrelfish	23	\$57	\$2.50
Parrotfish (misc)	1,473	\$5,006	\$3.40
Surgeonfish (misc)	113	\$239	\$2.11
Orangespine unicornfish	2	\$5	\$2.50
Unicornfish (misc)	256	\$634	\$2.48
Goatfish (misc)	53	\$123	\$2.34
Troll fish (misc)	116	\$201	\$1.73
Barracuda	165	\$317	\$1.91
Mahimahi	35,808	\$76,988	\$2.15
Blue marlin	2,001	\$2,669	\$1.33
Sailfish	433	\$871	\$2.01
Rainbow runner	4,199	\$8,394	\$2.00
Wahoo	6,936	\$16,480	\$2.38
Skipjack tuna	148,328	\$291,047	\$1.96
Dogtooth tuna	7,458	\$13,104	\$1.76
Yellowfin tuna	27,548	\$55,498	\$2.01
Saba (kawakawa)	5,455	\$9,565	\$1.75
Spiny lobster	2,948	\$19,408	\$6.58
Octopus	2,009	\$4,546	\$2.26
Squid	36	\$87	\$2.40
TOTAL	367,151	\$820,856	\$2.24

Table B-2
January 2004 Estimated Commercial Landings

Species	Pounds	Value	Price/Lb.
Bigeye scad	1,514	\$3,354	\$2.22
Jacks (misc)	83	\$192	\$2.32
Brassy trevally	27	\$55	\$2.00
Bottom fish	324	\$1,001	\$3.09
Sickle pomfret	75	\$189	\$2.50
Ehu (red snapper)	98	\$295	\$3.00
Grouper (misc)	77	\$232	\$3.00
Kalikali (yellowtail)	456	\$1,174	\$2.57
Onaga (red snapper)	165	\$675	\$4.08
Opakapaka (pink snapper)	151	\$528	\$3.50
Jobfish (uku)	42	\$73	\$1.75
Silvermouth (deep lehi)	40	\$140	\$3.50
Reef fish	7,429	\$19,461	\$2.62
Rabbitfish	853	\$2,780	\$3.26
Emperor (mafute/misc)	2,789	\$7,275	\$2.61
Parrotfish (misc)	175	\$595	\$3.39
Mahimahi	8,741	\$18,798	\$2.15
Blue marlin	491	\$736	\$1.50
Sailfish	85	\$193	\$2.28
Rainbow runner	798	\$1,464	\$1.83
Wahoo	993	\$2,577	\$2.60
Skipjack tuna	12,047	\$26,706	\$2.22
Dogtooth tuna	248	\$496	\$2.00
Yellowfin tuna	2,726	\$5,649	\$2.07
Saba (kawakawa)	971	\$1,910	\$1.97
Octopus	357	\$850	\$2.38
Squid	29	\$73	\$2.50
TOTAL	41,786	\$97,470	\$2.33

Table B-3
February 2004 Estimated Commercial Landings

Species	Pounds	Value	Price/Lb.
Bigeye scad	833	\$1,710	\$2.05
Bottom fish	307	\$785	\$2.55
Sickle pomfret	66	\$166	\$2.50
Ehu (red snapper)	20	\$60	\$3.00
Gindai (flower snapper)	218	\$655	\$3.00
Grouper (misc)	87	\$262	\$3.00
Kalikali (yellowtail)	216	\$541	\$2.50
Onaga (red snapper)	375	\$1,218	\$3.24
Opakapaka (pink snapper)	140	\$477	\$3.41
Reef fish	4,371	\$11,601	\$2.65
Rabbitfish	384	\$1,287	\$3.36
Emperor (mafute/misc)	995	\$2,943	\$2.96
Unicornfish (misc)	90	\$232	\$2.58
Goatfish (misc)	5	\$16	\$3.00
Mahimahi	8,954	\$18,200	\$2.03
Blue marlin	85	\$85	\$1.00
Sailfish	71	\$166	\$2.34
Rainbow runner	462	\$899	\$1.95
Wahoo	779	\$2,119	\$2.72
Skipjack tuna	7,882	\$18,390	\$2.33
Dogtooth tuna	309	\$600	\$1.94
Yellowfin tuna	3,503	\$7,243	\$2.07
Saba (kawakawa)	827	\$1,594	\$1.93
Spiny lobster	55	\$382	\$7.00
Octopus	117	\$251	\$2.14
TOTAL	31,152	\$71,880	\$2.31

Table B-4
March 2004 Estimated Commercial Landings

Species	Pounds	Value	Price/Lb.
Bigeye scad	1,184	\$2,769	\$2.34
Jacks (misc)	9	\$23	\$2.50
Blackjack	169	\$319	\$1.88
Bottom fish	504	\$1,571	\$3.12
Sickle pomfret	89	\$223	\$2.50
Ehu (red snapper)	175	\$524	\$3.00
Gindai (flower snapper)	47	\$142	\$3.00
Grouper (misc)	275	\$863	\$3.13
Kalikali (yellowtail)	451	\$1,140	\$2.53
Onaga (red snapper)	954	\$3,627	\$3.80
Opakapaka (pink snapper)	178	\$613	\$3.44
Jobfish (uku)	227	\$455	\$2.00
Amberjack	140	\$280	\$2.00
Reef Fish	5,996	\$15,793	\$2.63
Rabbitfish	339	\$1,110	\$3.28
Emperor (mafute/misc)	2,223	\$6,247	\$2.81
Parrotfish (misc)	45	\$117	\$2.62
Unicornfish (misc)	75	\$206	\$2.74
Mahimahi	7,977	\$16,522	\$2.07
Sailfish	117	\$233	\$1.98
Rainbow runner	294	\$505	\$1.72
Wahoo	1,107	\$2,612	\$2.36
Skipjack tuna	13,836	\$30,234	\$2.19
Dogtooth tuna	557	\$1,038	\$1.86
Yellowfin tuna	3,007	\$6,048	\$2.01
Saba (kawakawa)	441	\$882	\$2.00
Spiny lobster	64	\$445	\$7.00
Octopus	181	\$385	\$2.12
TOTAL	40,661	\$94,924	\$2.33

Table B-5
April 2004 Estimated Commercial Landings

Species	Pounds	Value	Price/Lb.
Bigeye scad	320	\$654	\$2.04
Mullet	5	\$11	\$2.50
Bottom fish	2,134	\$5,333	\$2.50
Sickle pomfret	95	\$249	\$2.61
Ehu (red snapper)	22	\$65	\$3.00
Gindai (flower snapper)	436	\$1,339	\$3.07
Grouper (misc)	85	\$256	\$3.00
Kalikali (yellowtail)	144	\$503	\$3.50
Onaga (red snapper)	259	\$1,019	\$3.94
Amberjack	164	\$327	\$2.00
Reef fish	4,933	\$12,387	\$2.51
Rabbitfish	258	\$832	\$3.22
Emperor (mafute/misc)	904	\$2,847	\$3.15
Squirrelfish	8	\$21	\$2.50
Parrotfish (misc)	176	\$518	\$2.94
Surgeonfish (misc)	26	\$64	\$2.50
Orangespine unicornfish	2	\$5	\$2.50
Unicornfish (misc)	15	\$43	\$2.77
Troll fish (misc)	53	\$105	\$2.00
Barracuda	11	\$11	\$1.00
Mahimahi	3,267	\$7,174	\$2.20
Sailfish	91	\$159	\$1.75
Rainbow runner	271	\$524	\$1.93
Wahoo	895	\$2,216	\$2.48
Skipjack tuna	12,342	\$25,754	\$2.09
Dogtooth tuna	817	\$1,607	\$1.97
Yellowfin tuna	1,492	\$3,719	\$2.49
Saba (kawakawa)	182	\$364	\$2.00
Spiny lobster	66	\$448	\$6.78
Octopus	55	\$123	\$2.25
TOTAL	29,527	\$68,677	\$2.33

Table B-6
May 2004 Estimated Commercial Landings

Species	Pounds	Value	Price/Lb.
Bigeye scad	201	\$489	\$2.43
Jacks (misc)	21	\$63	\$3.00
Bottom fish	4,500	\$9,996	\$2.22
Sickle pomfret	47	\$118	\$2.50
Ehu (red snapper)	127	\$382	\$3.00
Gindai (flower snapper)	176	\$529	\$3.00
Grouper (misc)	321	\$887	\$2.77
Kalikali (yellowtail)	530	\$1,034	\$1.95
Onaga (red snapper)	142	\$573	\$4.04
Opakapaka (pink snapper)	24	\$77	\$3.25
Blueline snapper	102	\$331	\$3.25
Reef fish	6,199	\$15,995	\$2.58
Rabbitfish	181	\$556	\$3.07
Emperor (mafute/misc)	1,595	\$5,105	\$3.20
Squirrelfish	15	\$36	\$2.50
Parrotfish (misc)	70	\$256	\$3.66
Unicornfish (misc)	73	\$145	\$2.00
Barracuda	122	\$244	\$2.00
Mahimahi	3,393	\$7,820	\$2.30
Blue marlin	789	\$789	\$1.00
Sailfish	69	\$121	\$1.75
Rainbow runner	268	\$645	\$2.41
Wahoo	735	\$1,824	\$2.48
Skipjack tuna	18,385	\$34,701	\$1.89
Dogtooth tuna	1,695	\$3,077	\$1.82
Yellowfin tuna	1,349	\$2,808	\$2.08
Saba (kawakawa)	533	\$1,065	\$2.00
Spiny lobster	137	\$892	\$6.50
Octopus	34	\$72	\$2.11
TOTAL	41,835	\$90,631	\$2.17

Table B-7
June 2004 Estimated Commercial Landings

Species	Pounds	Value	Price/Lb.
Bigeye scad	420	\$990	\$2.35
Jacks (misc)	119	\$325	\$2.74
Blackjack	205	\$372	\$1.81
Bottom fish	1,190	\$3,004	\$2.53
Sickle pomfret	25	\$64	\$2.50
Ehu (red snapper)	164	\$491	\$3.00
Kalikali (yellowtail)	309	\$890	\$2.88
Onaga (red snapper)	164	\$655	\$4.00
Opakapaka (pink snapper)	98	\$245	\$2.50
Jobfish (uku)	51	\$95	\$1.86
Reef fish	3,625	\$9,440	\$2.60
Rabbitfish	53	\$172	\$3.22
Emperor (mafute/misc)	1,072	\$2,685	\$2.50
Parrotfish (misc)	145	\$533	\$3.67
Goatfish (misc)	20	\$40	\$2.00
Barracuda	33	\$62	\$1.90
Mahimahi	89	\$226	\$2.54
Rainbow runner	240	\$478	\$1.99
Wahoo	280	\$612	\$2.19
Skipjack tuna	14,187	\$27,005	\$1.90
Dogtooth tuna	871	\$1,312	\$1.51
Yellowfin tuna	1,088	\$2,175	\$2.00
Saba (kawakawa)	20	\$30	\$1.50
Spiny lobster	148	\$1,034	\$6.98
Octopus	43	\$105	\$2.47
Squid	7	\$14	\$2.00
TOTAL	24,665	\$53,052	\$2.15

Table B-8
July 2004 Estimated Commercial Landings

Species	Pounds	Value	Price/Lb.
Bigeye scad	366	\$907	\$2.48
Jacks (misc)	235	\$598	\$2.55
Blackjack	74	\$136	\$1.85
Bottom fish	3,784	\$8,666	\$2.29
Ehu (red snapper)	4	\$5	\$1.50
Gindai (flower snapper)	62	\$139	\$2.24
Grouper (misc)	5	\$8	\$1.50
Kalikali (yellowtail)	817	\$2,216	\$2.71
Jobfish (uku)	91	\$202	\$2.21
Silvermouth (deep lehi)	47	\$118	\$2.50
Amberjack	78	\$117	\$1.50
Reef Fish	4,460	\$11,359	\$2.55
Rabbitfish	733	\$2,330	\$3.18
Emperor (mafute/misc)	1,119	\$2,781	\$2.48
Parrotfish (misc)	227	\$789	\$3.47
Unicornfish (misc)	3	\$8	\$3.00
Mahimahi	29	\$87	\$3.00
Rainbow runner	304	\$642	\$2.11
Wahoo	174	\$395	\$2.27
Skipjack tuna	11,470	\$22,530	\$1.96
Dogtooth tuna	118	\$295	\$2.50
Yellowfin tuna	2,959	\$6,320	\$2.14
Spiny lobster	1,821	\$11,824	\$6.49
Octopus	182	\$441	\$2.42
TOTAL	29,162	\$72,914	\$2.50

Table B-9
August 2004 Estimated Commercial Landings

Species	Pounds	Value	Price/Lb.
Bigeye scad	968	\$2,360	\$2.44
Blackjack	29	\$58	\$2.00
Giant trevally	91	\$250	\$2.75
Bottom fish	1,225	\$2,604	\$2.13
Ehu (red snapper)	73	\$219	\$3.00
Gindai (flower snapper)	36	\$109	\$3.00
Grouper (misc)	36	\$109	\$3.00
Kalikali (yellowtail)	89	\$223	\$2.50
Jobfish (uku)	25	\$51	\$2.00
Amberjack	59	\$150	\$2.54
Red snapper	204	\$407	\$2.00
Reef fish	4,194	\$10,559	\$2.52
Rabbitfish	58	\$177	\$3.03
Emperor (mafute/misc)	1,079	\$2,705	\$2.51
Parrotfish (misc)	13	\$34	\$2.50
Surgeonfish (misc)	87	\$175	\$2.00
Goatfish (misc)	5	\$11	\$2.00
Troll fish (misc)	38	\$57	\$1.50
Mahimahi	200	\$502	\$2.51
Rainbow runner	451	\$924	\$2.05
Wahoo	58	\$87	\$1.50
Skipjack tuna	12,980	\$24,014	\$1.85
Dogtooth tuna	728	\$1,092	\$1.50
Yellowfin tuna	2,010	\$3,768	\$1.87
Saba (kawakawa)	89	\$134	\$1.50
Spiny lobster	382	\$2,455	\$6.43
Octopus	355	\$765	\$2.16
TOTAL	25,566	\$53,999	\$2.11

Table B-10
September 2004 Estimated Commercial Landings

Species	Pounds	Value	Price/Lb.
Bigeye scad	681	\$1,719	\$2.52
Bottom fish	2,451	\$5,603	\$2.29
Sickle pomfret	115	\$286	\$2.50
Ehu (red snapper)	27	\$82	\$3.00
Kalikali (yellowtail)	64	\$159	\$2.50
Onaga (red snapper)	140	\$583	\$4.15
Jobfish (uku)	111	\$304	\$2.75
Reef fish	3,021	\$8,422	\$2.79
Wrasse	136	\$477	\$3.50
Rabbitfish	469	\$1,523	\$3.25
Emperor (mafute/misc)	391	\$1,035	\$2.65
Parrotfish (misc)	203	\$732	\$3.61
Mahimahi	135	\$397	\$2.94
Rainbow runner	521	\$1,160	\$2.23
Wahoo	176	\$374	\$2.12
Skipjack tuna	14,359	\$25,485	\$1.77
Dogtooth tuna	903	\$1,396	\$1.55
Yellowfin tuna	3,141	\$5,447	\$1.73
Saba (kawakawa)	49	\$74	\$1.50
Spiny lobster	132	\$923	\$7.00
Octopus	272	\$630	\$2.31
TOTAL	27,497	\$56,811	\$2.07

Table B-11
October 2004 Estimated Commercial Landings

Species	Pounds	Value	Price/Lb.
Bigeye scad	808	\$1,865	\$2.31
Jacks (misc)	11	\$16	\$1.50
Blackjack	281	\$594	\$2.11
Bottom fish	2,492	\$5,489	\$2.20
Ehu (red snapper)	175	\$524	\$3.00
Gindai (flower snapper)	17	\$45	\$2.68
Kalikali (yellowtail)	100	\$249	\$2.50
Onaga (red snapper)	89	\$356	\$4.00
Jobfish (uku)	514	\$842	\$1.64
Silvermouth (deep lehi)	539	\$1,348	\$2.50
Reef fish	3,646	\$8,853	\$2.43
Rabbitfish	145	\$471	\$3.25
Emperor (mafute/misc)	981	\$2,493	\$2.54
Parrotfish (misc)	8	\$29	\$3.50
Mahimahi	222	\$557	\$2.51
Blue marlin	418	\$732	\$1.75
Rainbow runner	418	\$764	\$1.83
Wahoo	463	\$950	\$2.05
Skipjack tuna	12,176	\$21,866	\$1.80
Dogtooth tuna	909	\$1,434	\$1.58
Yellowfin tuna	2,152	\$3,922	\$1.82
Saba (kawakawa)	143	\$214	\$1.50
Spiny lobster	71	\$496	\$7.00
Octopus	259	\$591	\$2.28
TOTAL	27,036	\$54,700	\$2.02

Table B-12
November 2004 Estimated Commercial Landings

Species	Pounds	Value	Price/Lb.
Bigeye scad	543	\$1,206	\$2.22
Mullet	59	\$148	\$2.50
Blackjack	40	\$70	\$1.75
Bottom fish	902	\$2,539	\$2.81
Ehu (red snapper)	206	\$617	\$3.00
Grouper (misc)	138	\$413	\$3.00
Kalikali (yellowtail)	25	\$38	\$1.50
Onaga (red snapper)	540	\$2,103	\$3.89
Jobfish (uku)	133	\$230	\$1.73
Reef fish	3,344	\$7,932	\$2.37
Rabbitfish	174	\$575	\$3.30
Emperor (mafute/misc)	5,201	\$13,589	\$2.61
Parrotfish (misc)	257	\$884	\$3.44
Goatfish (misc)	22	\$56	\$2.56
Mahimahi	718	\$1,683	\$2.34
Rainbow runner	102	\$175	\$1.72
Wahoo	936	\$1,960	\$2.09
Skipjack tuna	10,651	\$19,755	\$1.85
Dogtooth tuna	112	\$209	\$1.87
Yellowfin tuna	2,197	\$4,078	\$1.86
Saba (kawakawa)	989	\$1,484	\$1.50
Spiny lobster	73	\$509	\$7.00
Octopus	82	\$187	\$2.28
TOTAL	27,445	\$60,440	\$2.20

Table B-13
December 2004 Estimated Commercial Landings

Species	Pounds	Value	Price/Lb.
Bigeye scad	121	\$320	\$2.65
Blackjack	133	\$232	\$1.75
Bottom fish	1,019	\$2,819	\$2.77
Sickle pomfret	45	\$114	\$2.50
Ehu (red snapper)	47	\$142	\$3.00
Gindai (flower snapper)	49	\$147	\$3.00
Grouper (misc)	47	\$142	\$3.00
Kalikali (yellowtail)	40	\$100	\$2.50
Onaga (red snapper)	332	\$1,338	\$4.03
Opakapaka (pink snapper)	258	\$645	\$2.50
Silvermouth (deep lehi)	111	\$276	\$2.50
Amberjack	47	\$83	\$1.75
Reef fish	3,465	\$8,378	\$2.42
Rabbitfish	269	\$875	\$3.25
Emperor (mafute/misc)	538	\$1,434	\$2.67
Parrotfish (misc)	153	\$519	\$3.40
Troll fish (misc)	25	\$38	\$1.50
Mahimahi	2,082	\$5,022	\$2.41
Blue marlin	218	\$327	\$1.50
Rainbow runner	71	\$213	\$3.00
Wahoo	340	\$754	\$2.22
Skipjack tuna	8,011	\$14,609	\$1.82
Dogtooth tuna	190	\$547	\$2.88
Yellowfin tuna	1,924	\$4,319	\$2.24
Saba (kawakawa)	1,211	\$1,816	\$1.50
Octopus	72	\$146	\$2.03
TOTAL	20,819	\$45,357	\$2.18

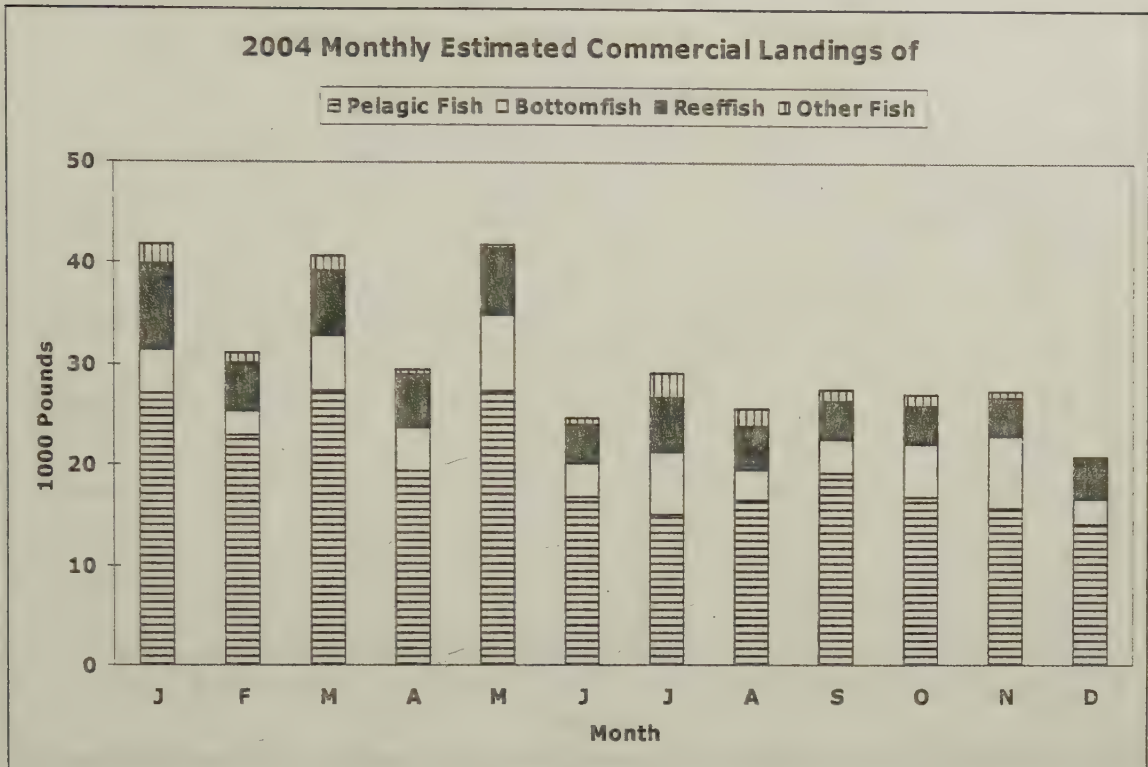


Figure B-1-1

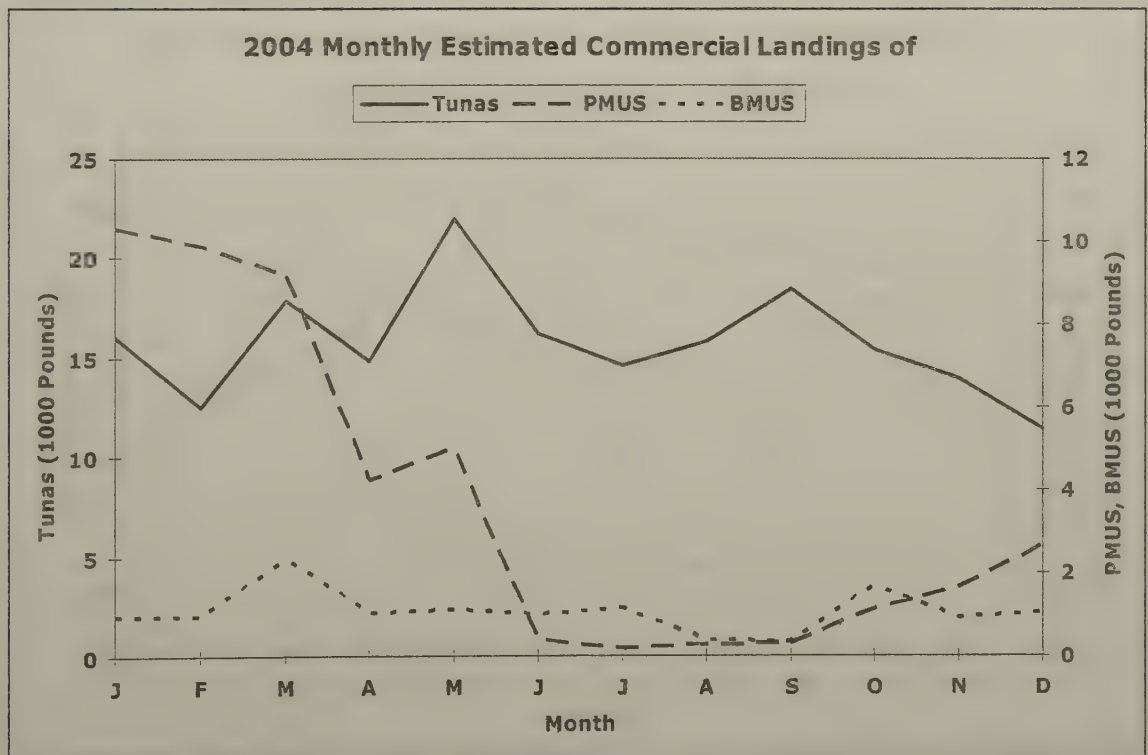


Figure B-1-2

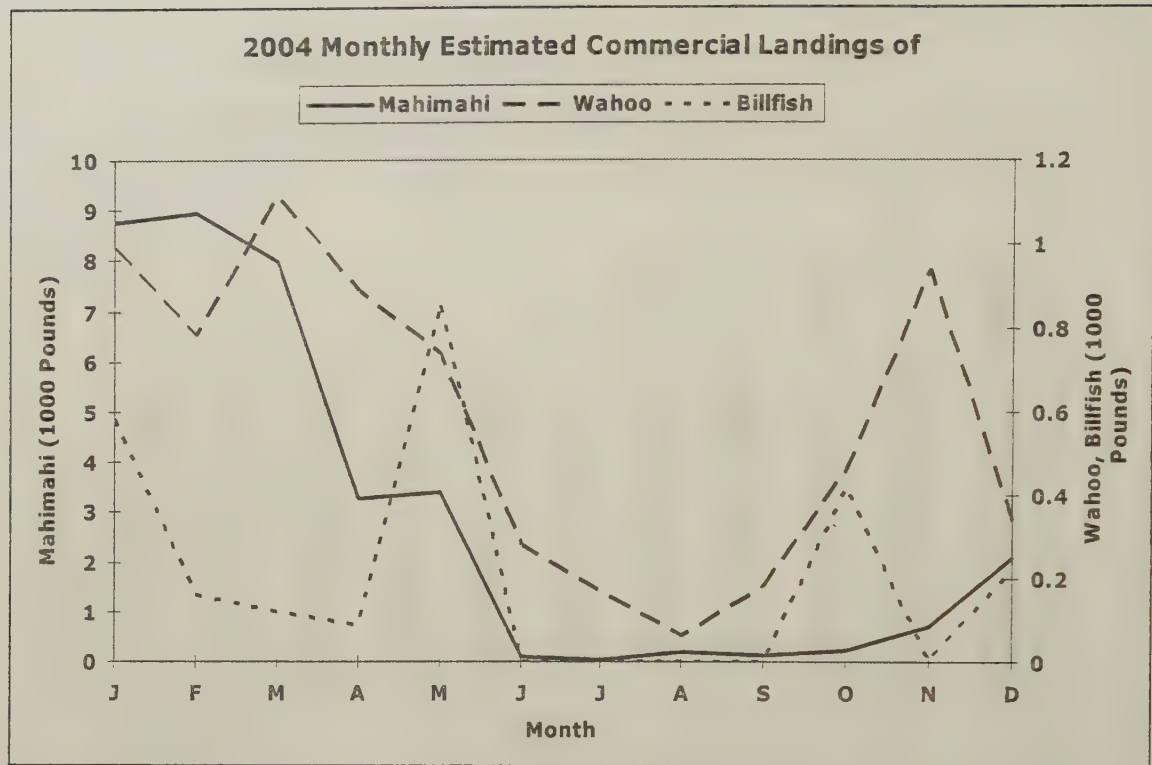


Figure B-1-3

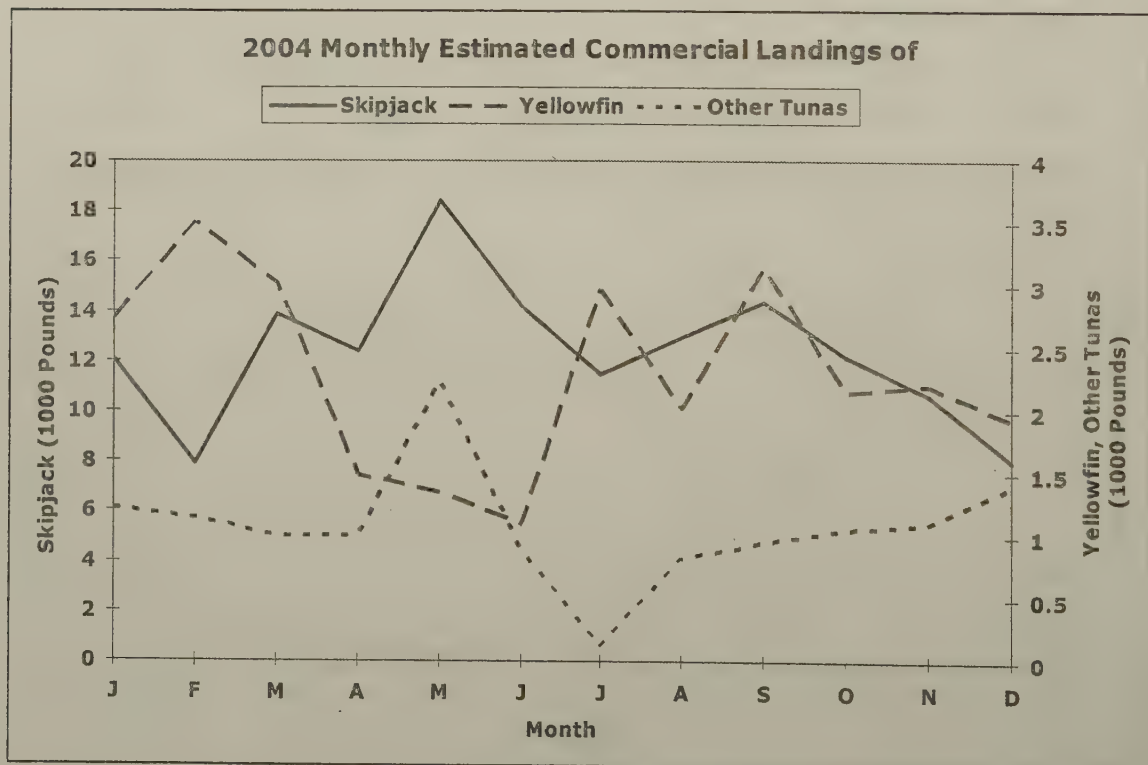


Figure B-1-4

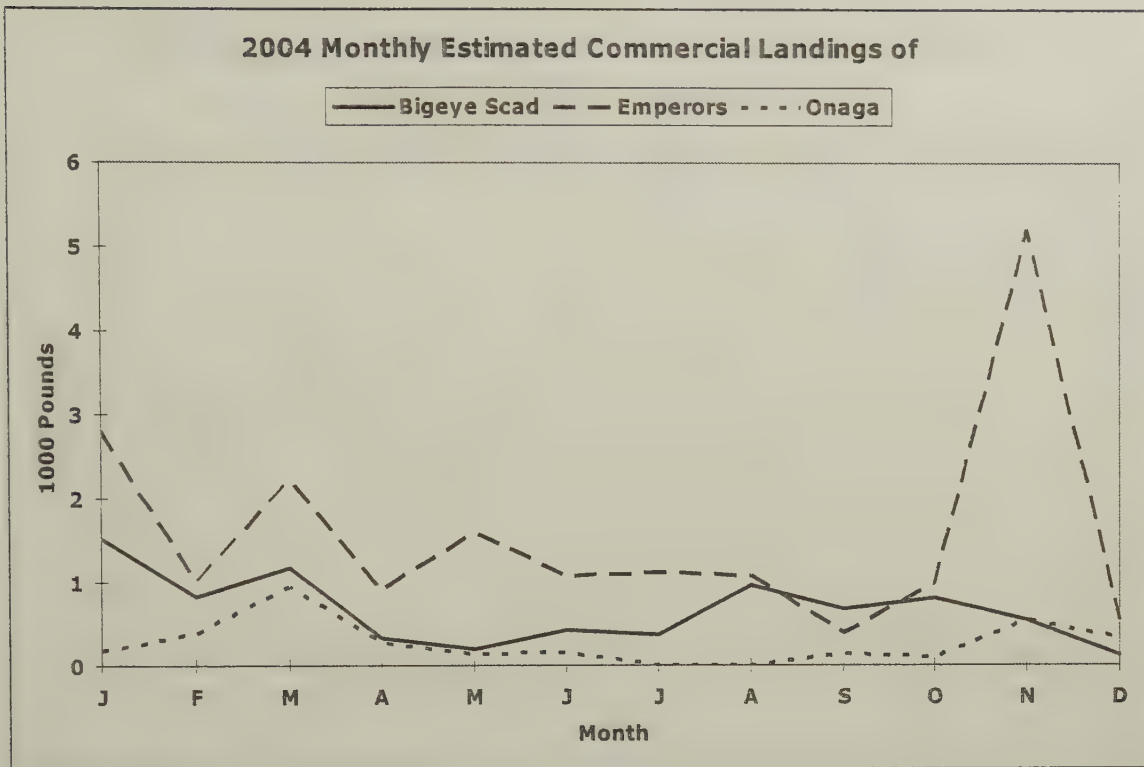


Figure B-1-5

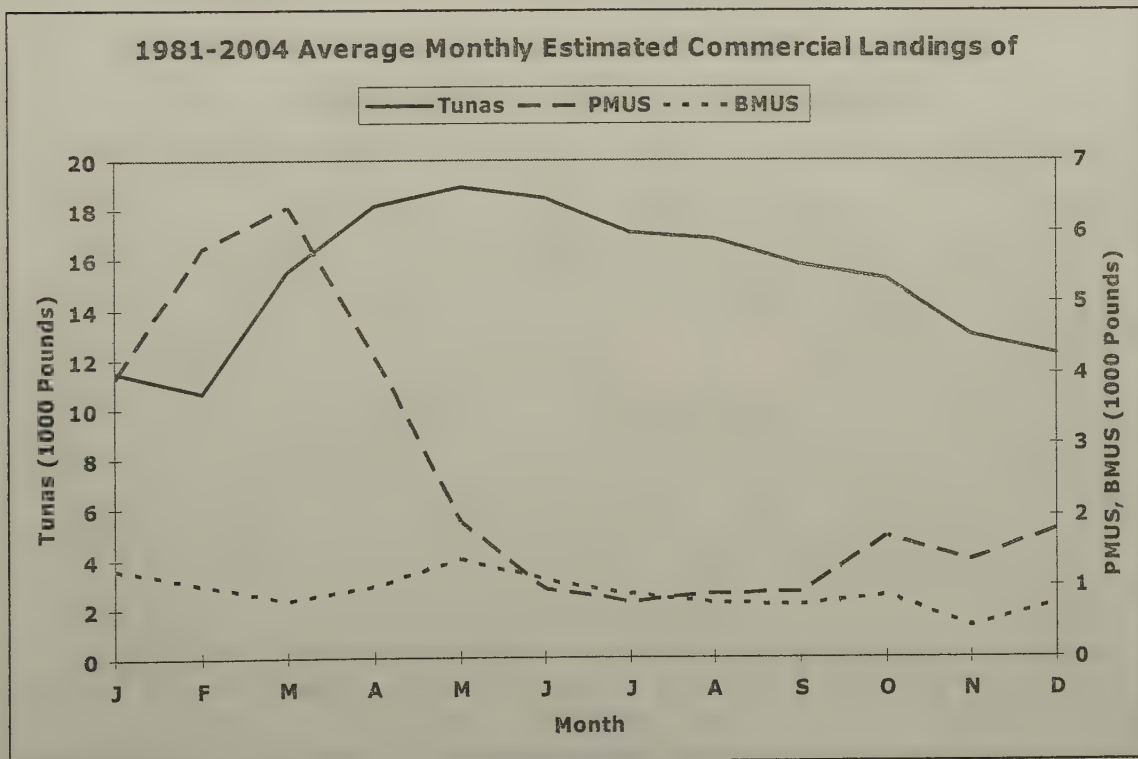


Figure B-2-1

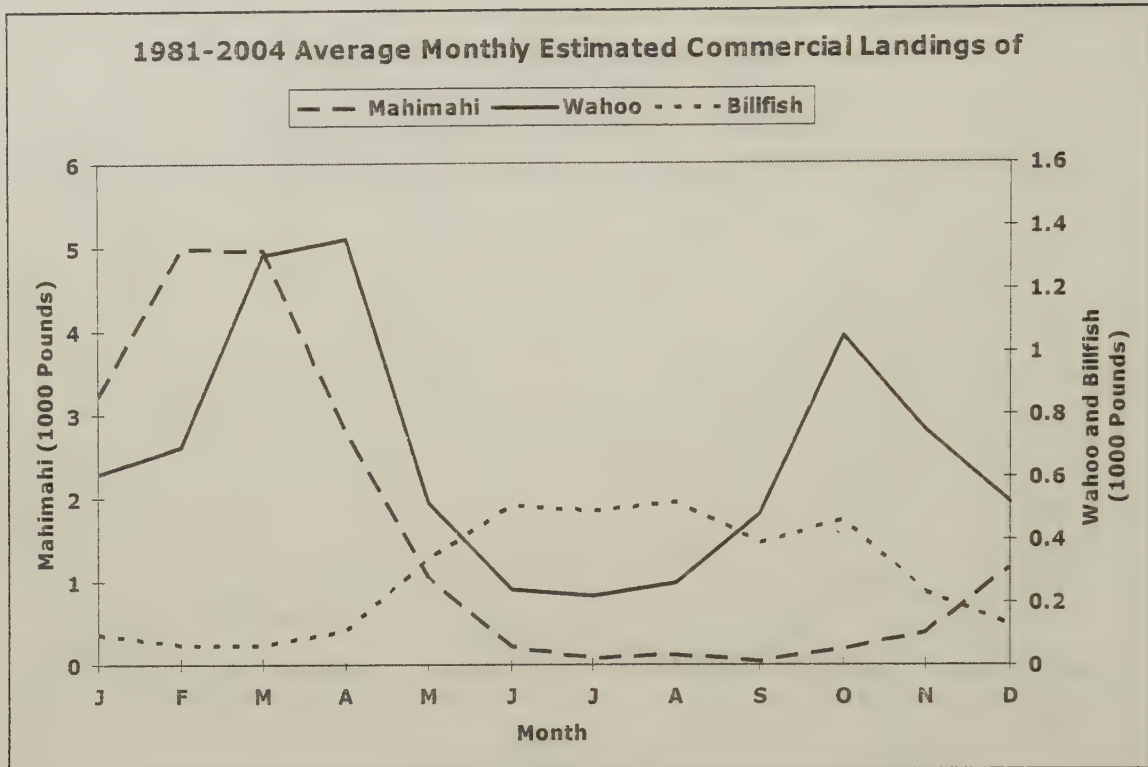


Figure B-2-2

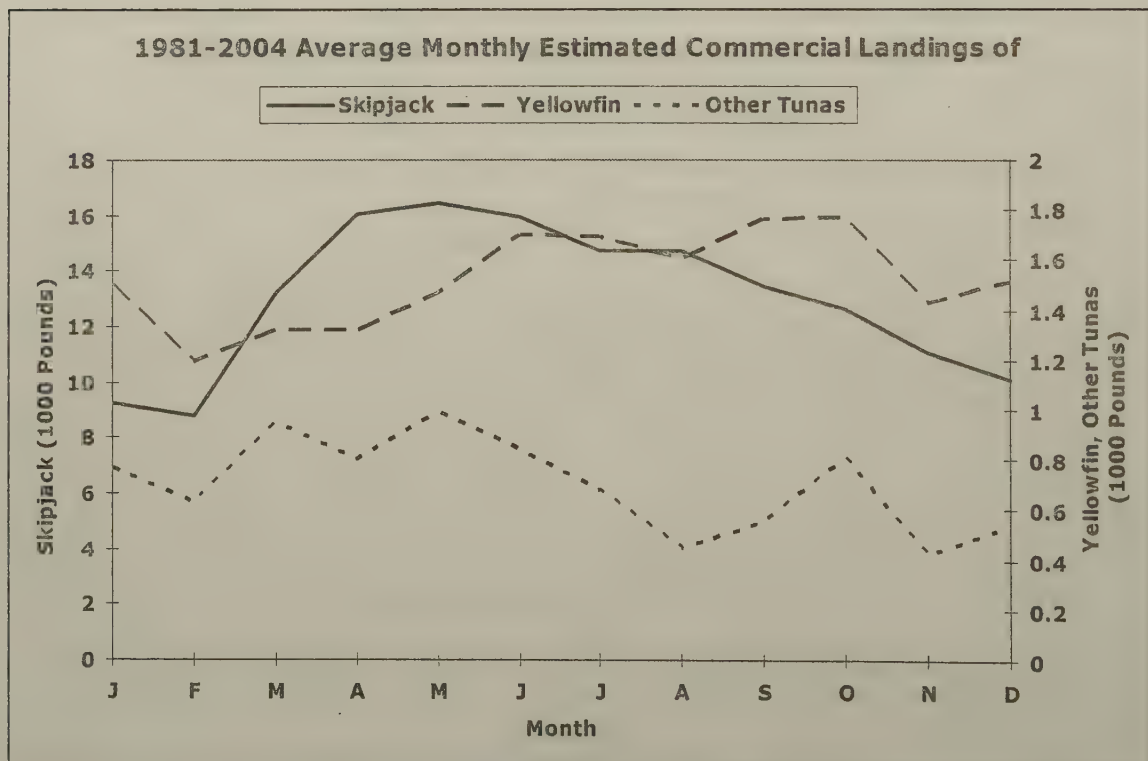


Figure B-2-3

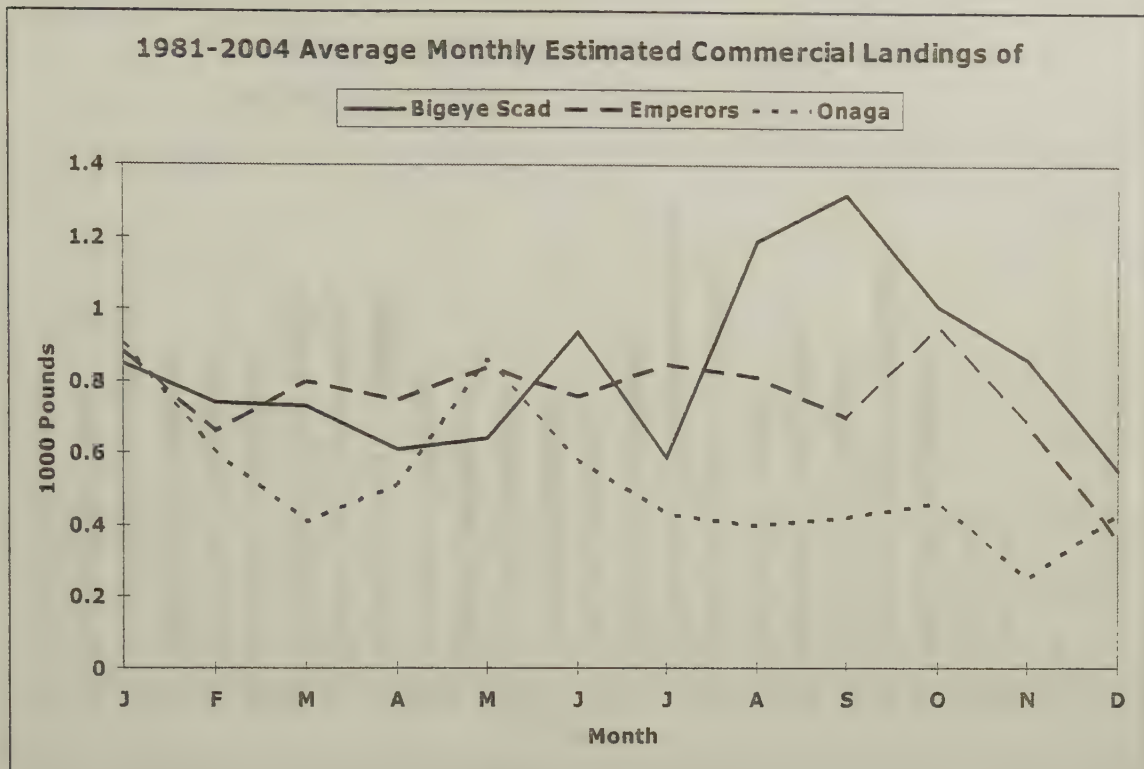


Figure B-2-4

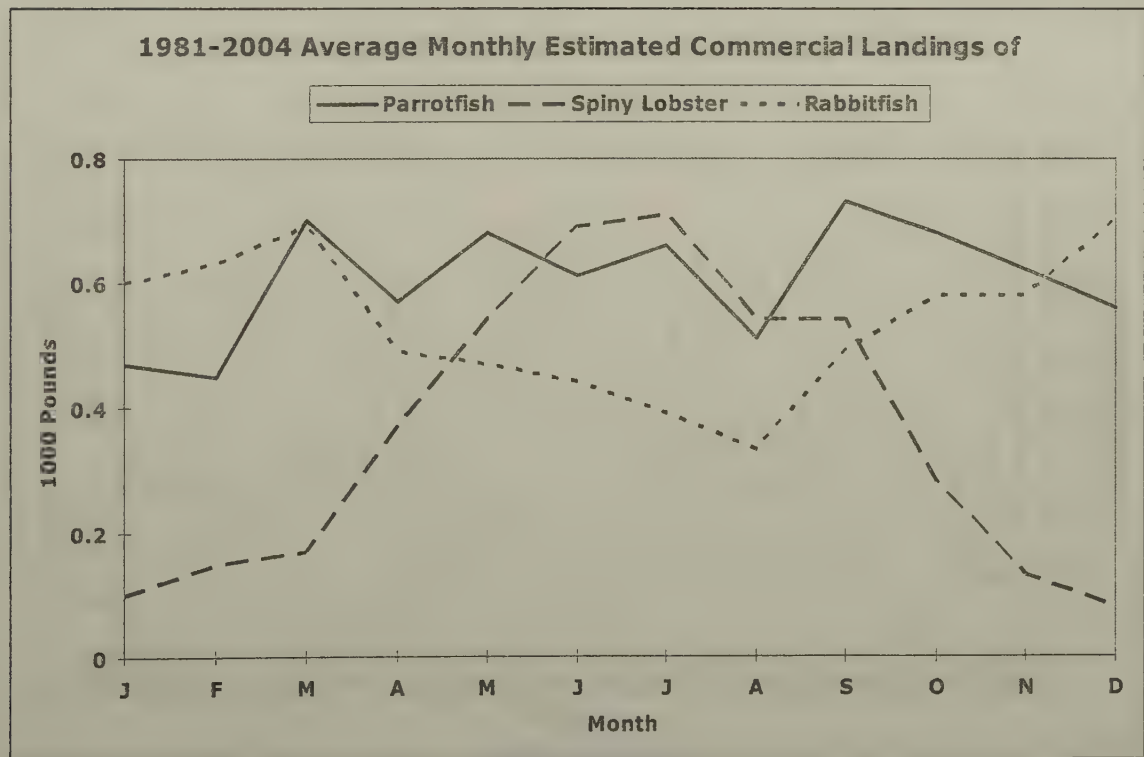


Figure B-2-5

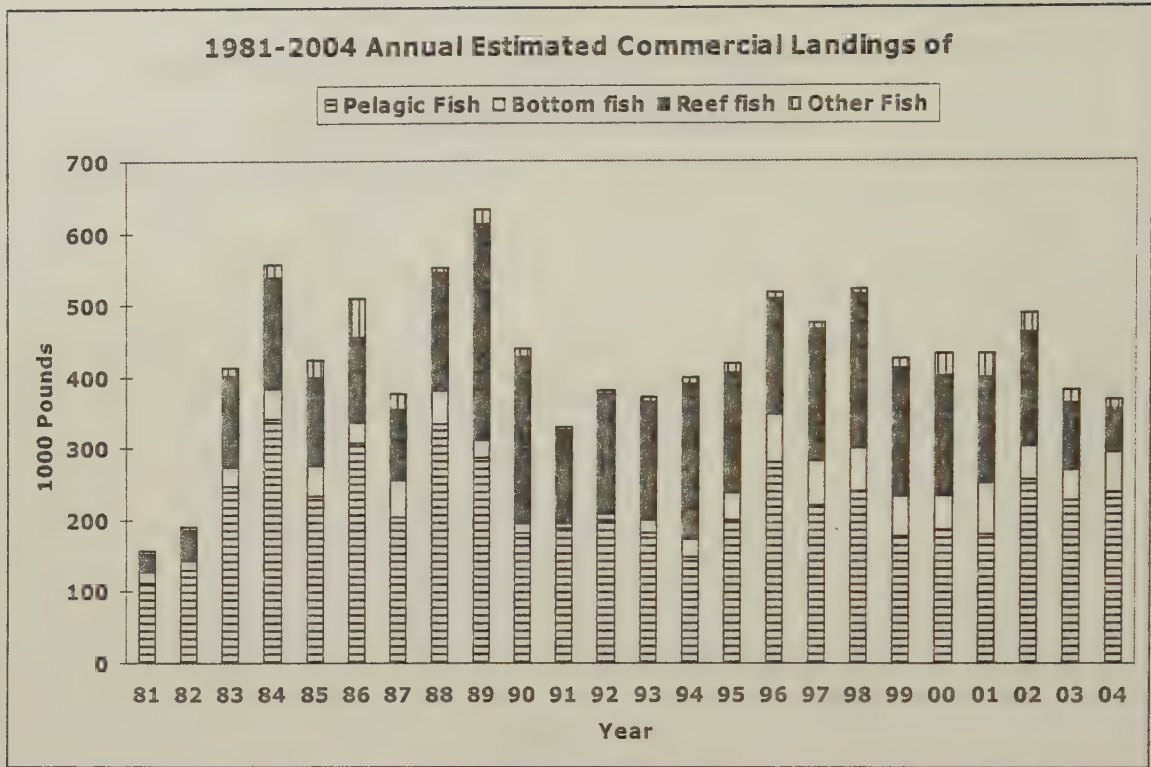


Figure B-3-1

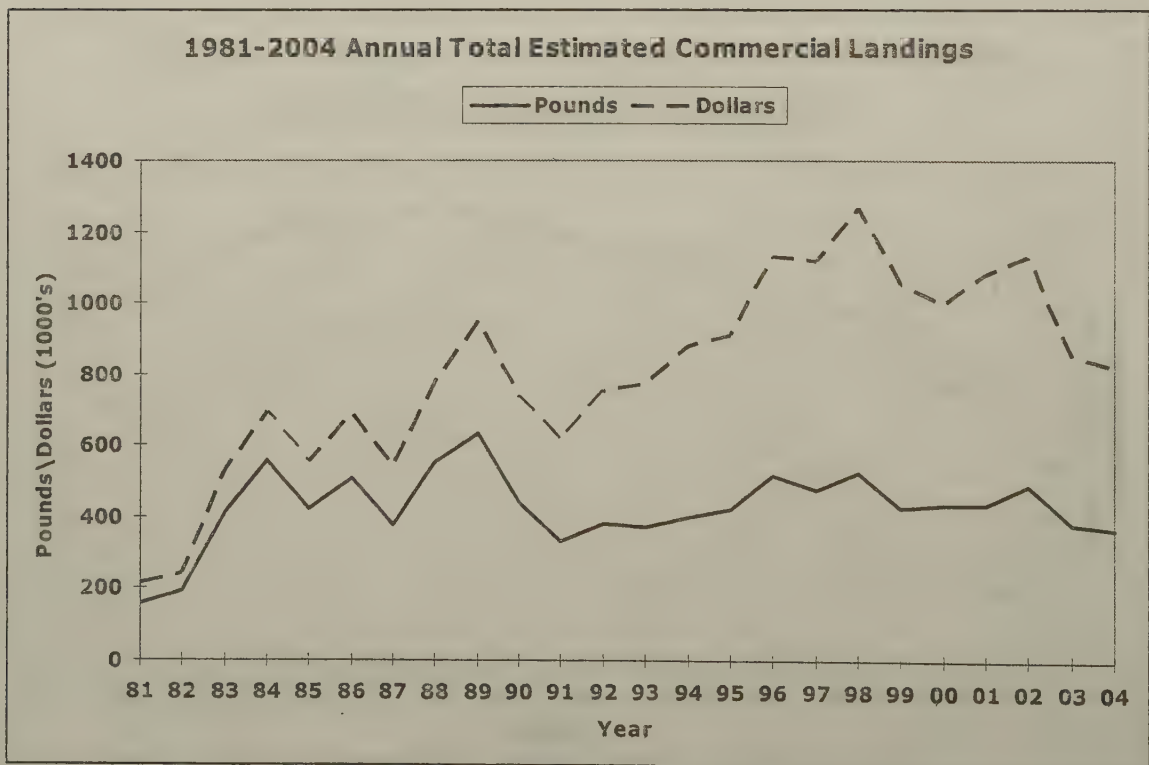


Figure B-3-2

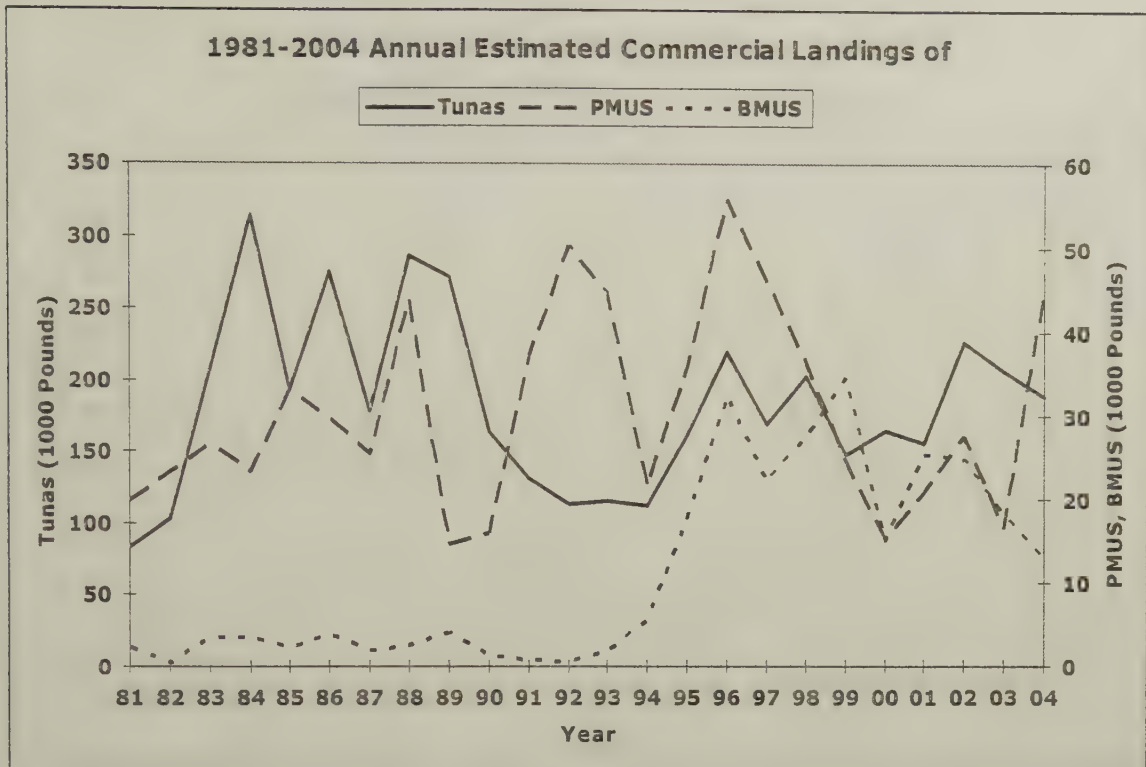


Figure B-3-3

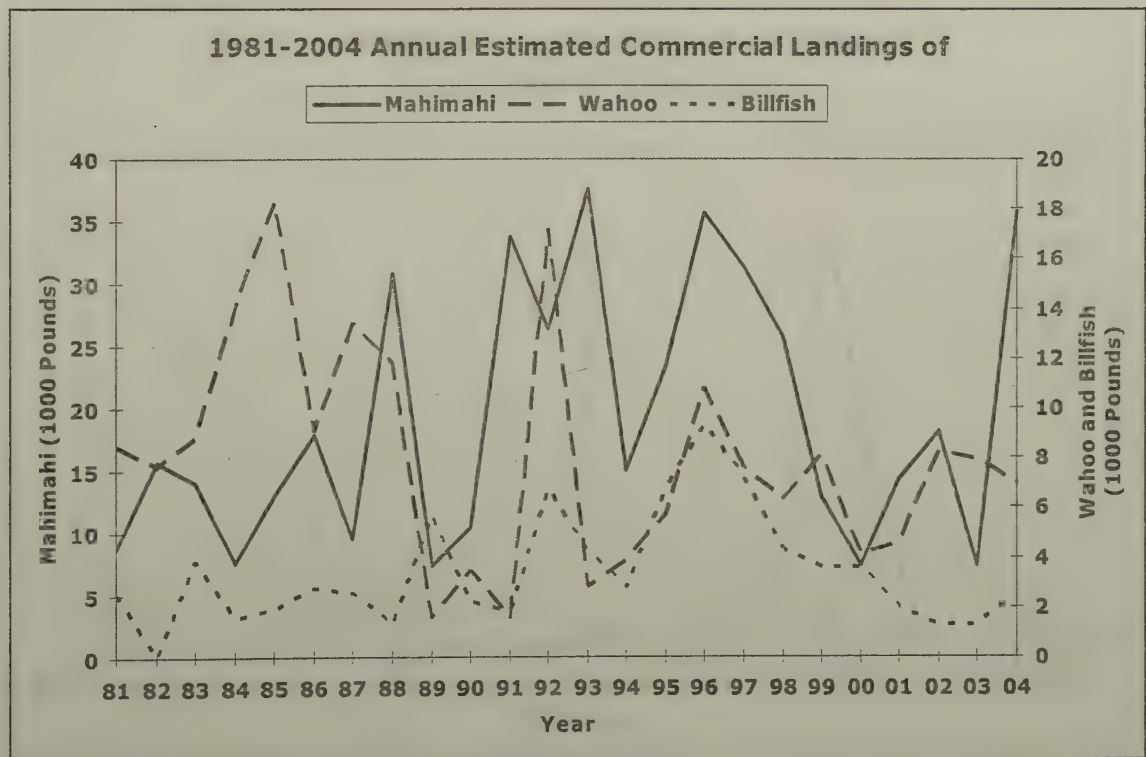


Figure B-3-4

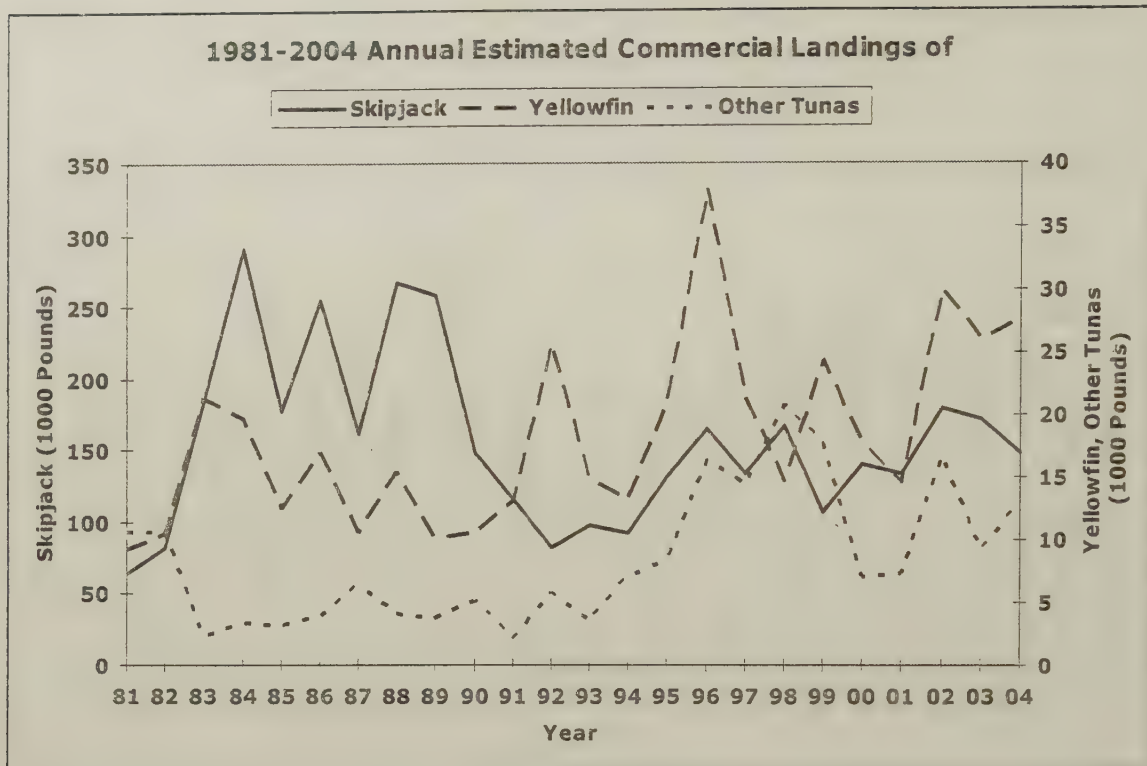


Figure B-3-5

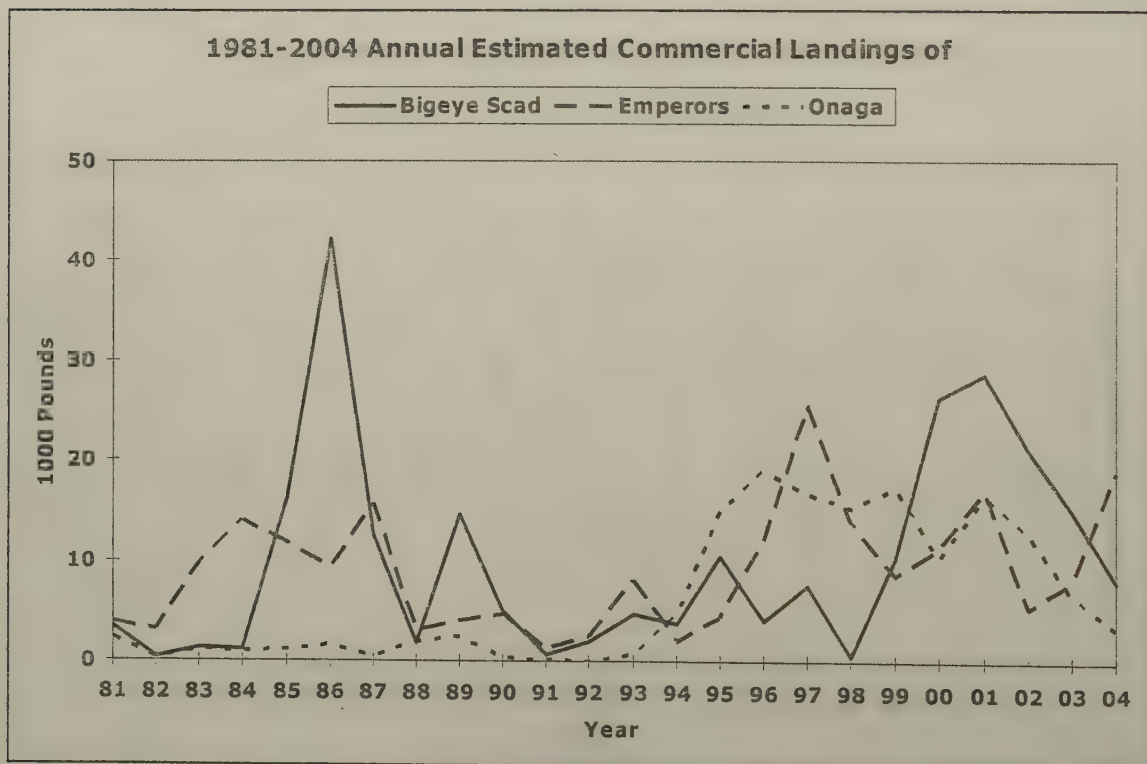


Figure B-3-6

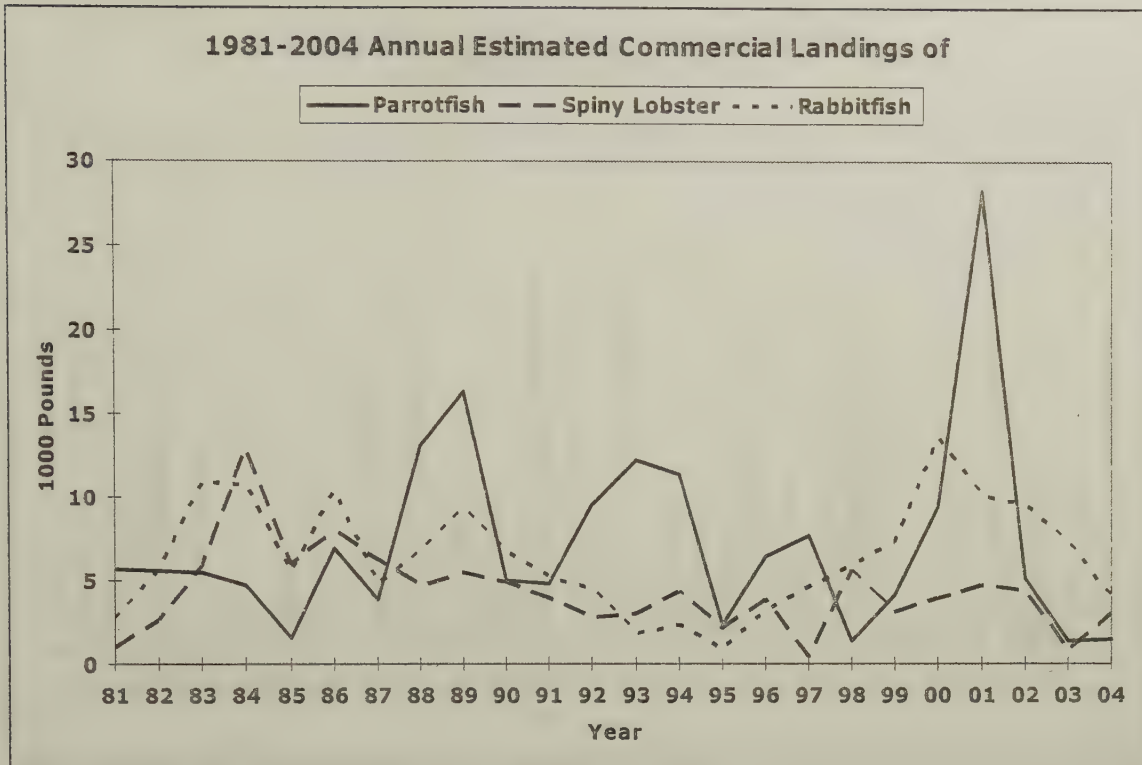


Figure B-3-7

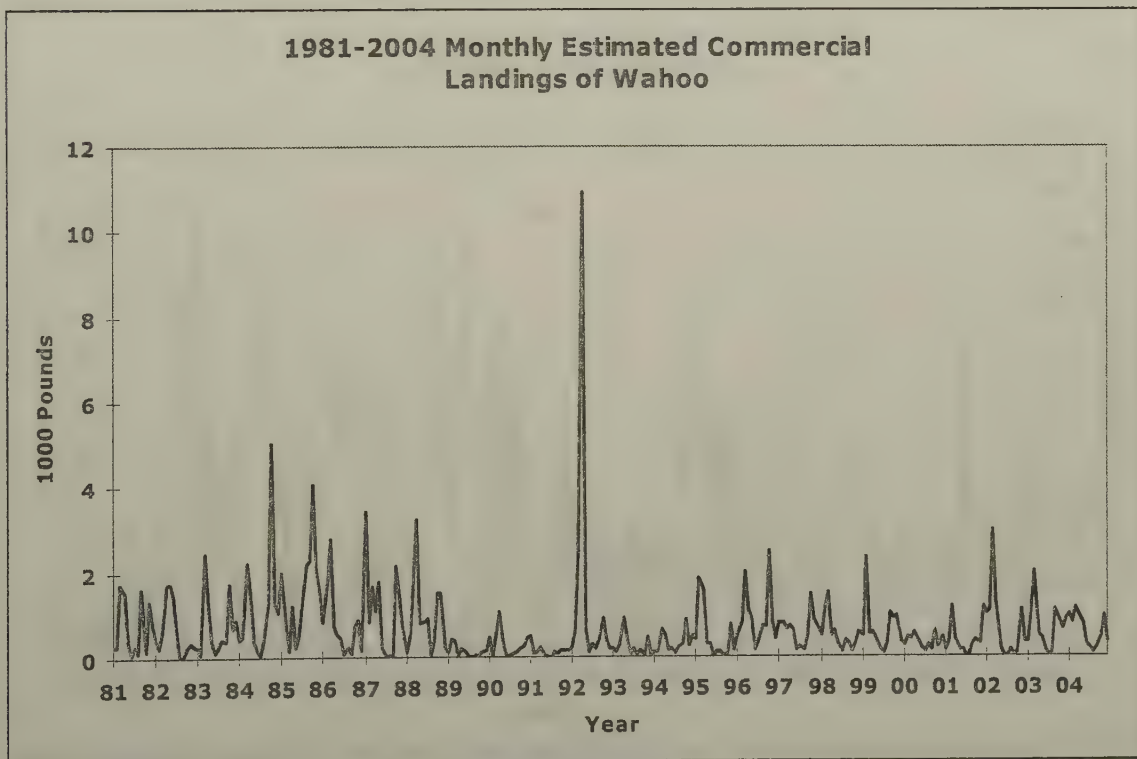


Figure B-4-1

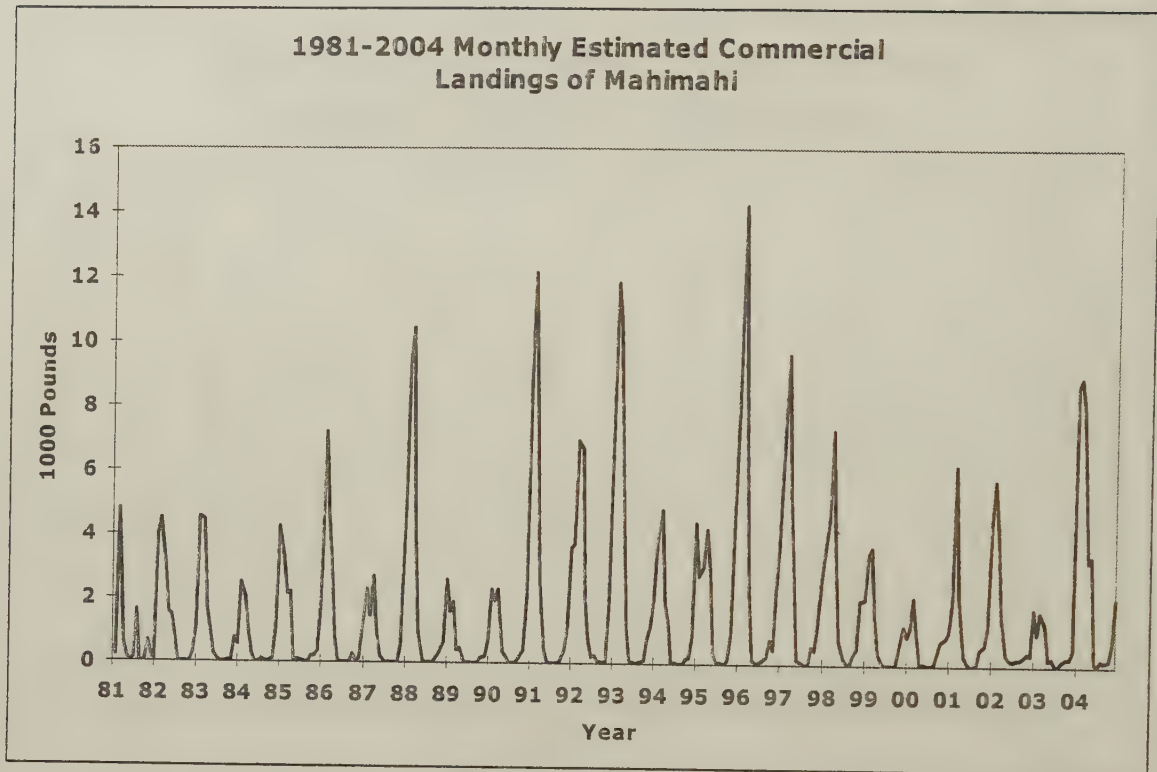


Figure B-4-2

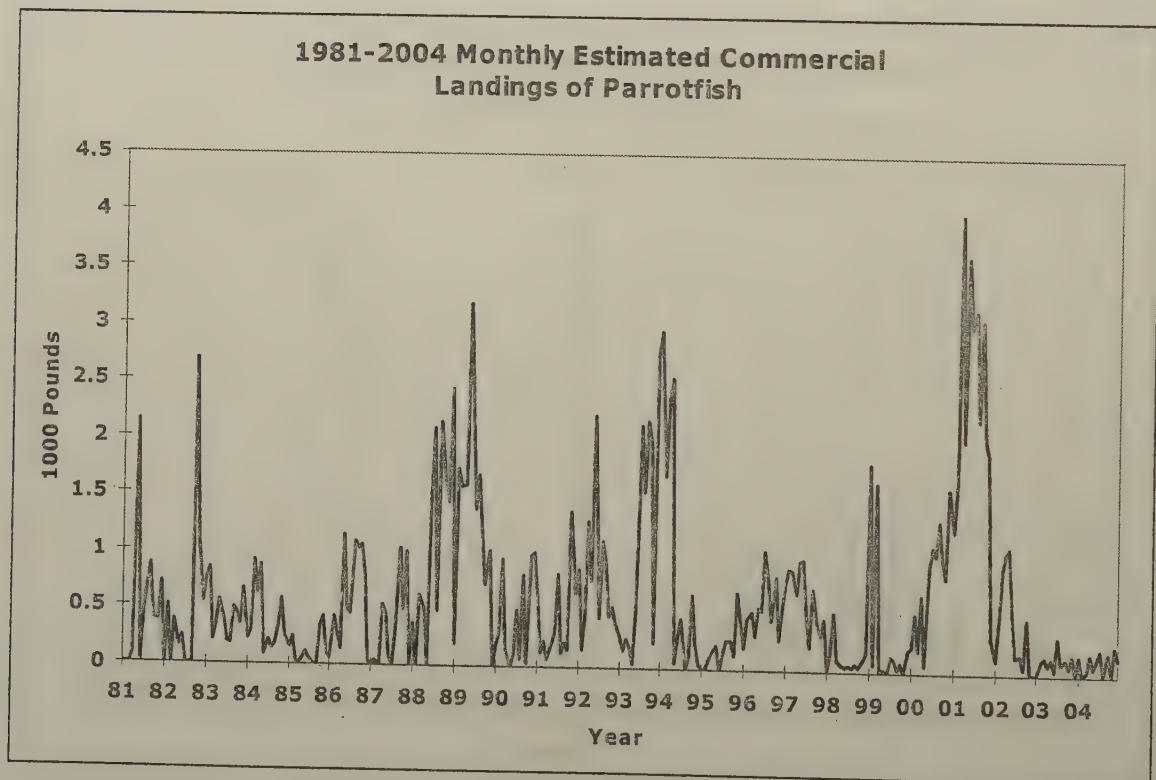


Figure B-4-3

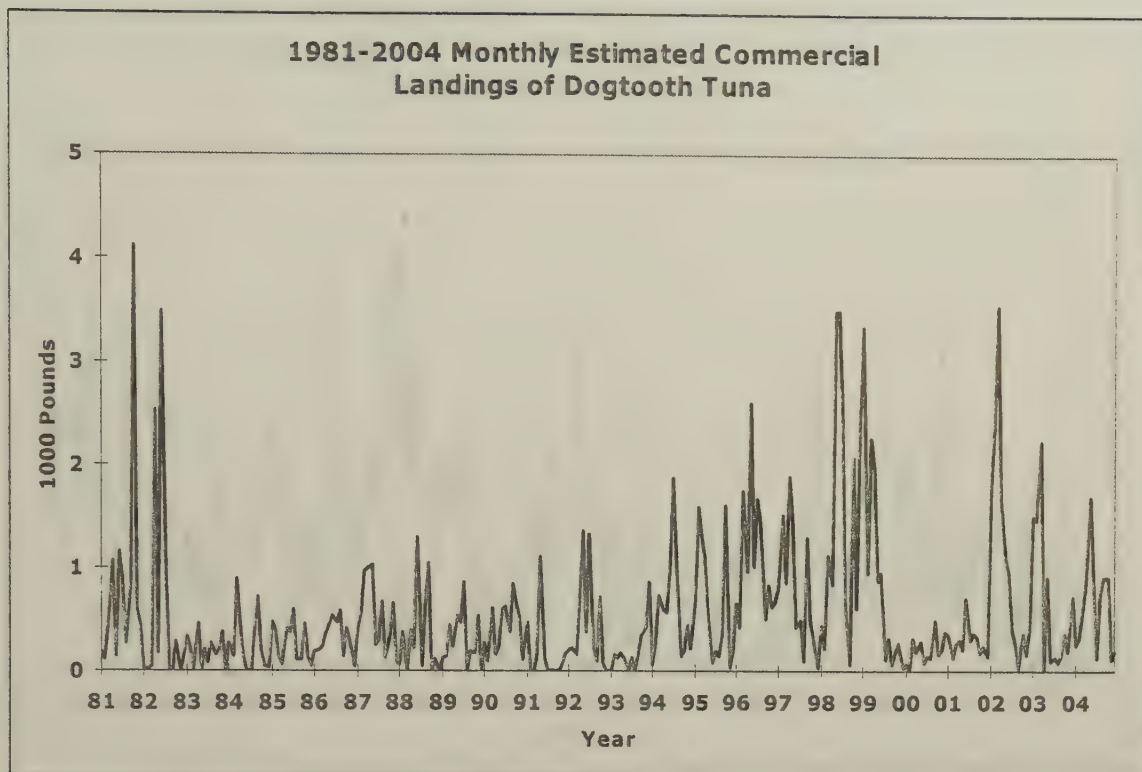


Figure B-4-4

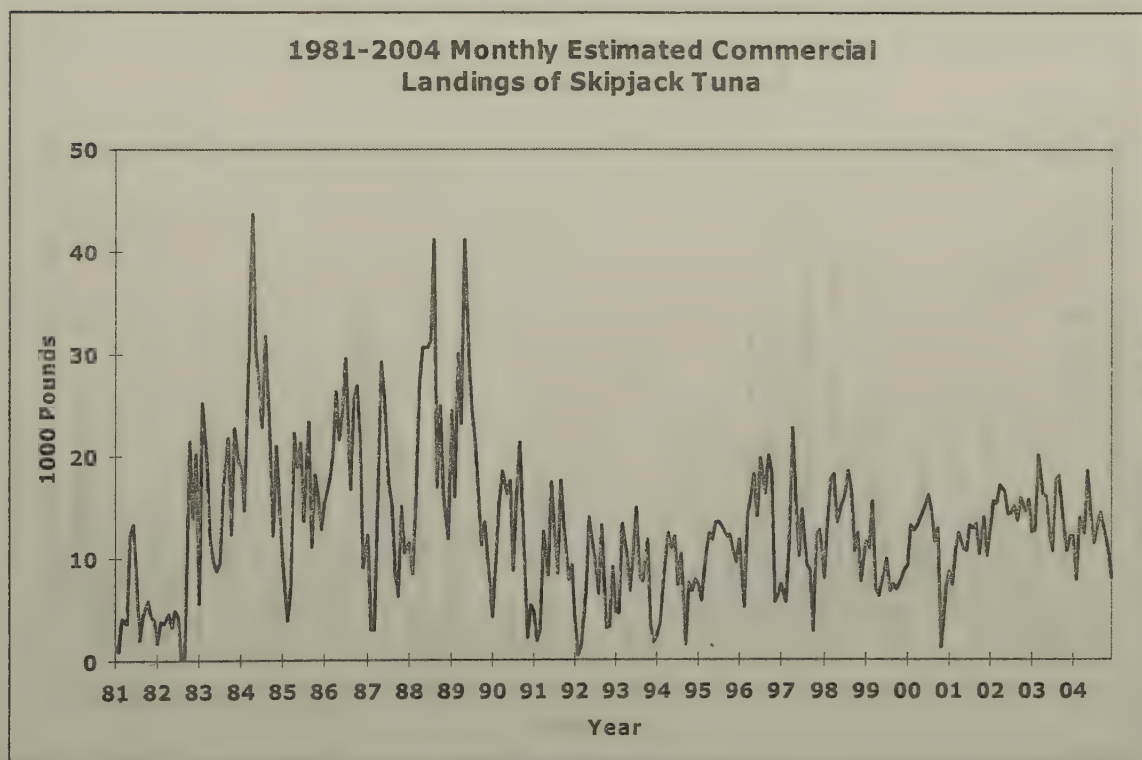


Figure B-4-5

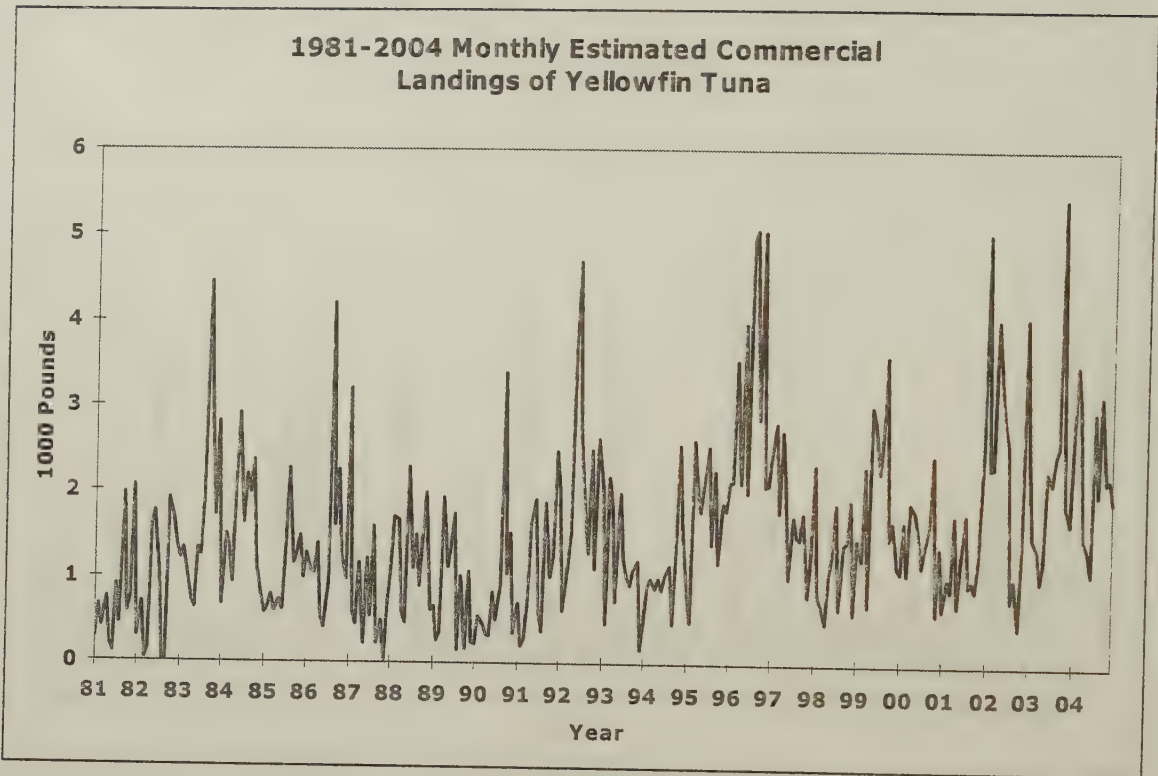


Figure B-4-6

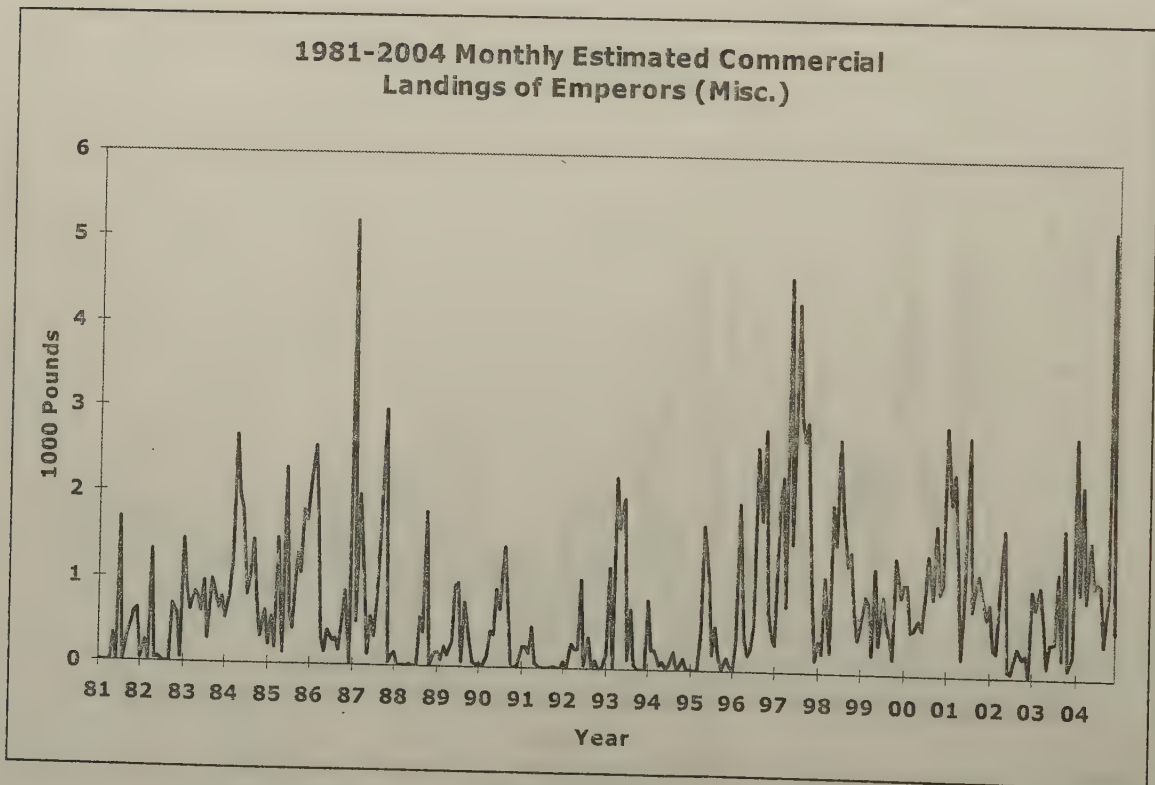


Figure B-4-7

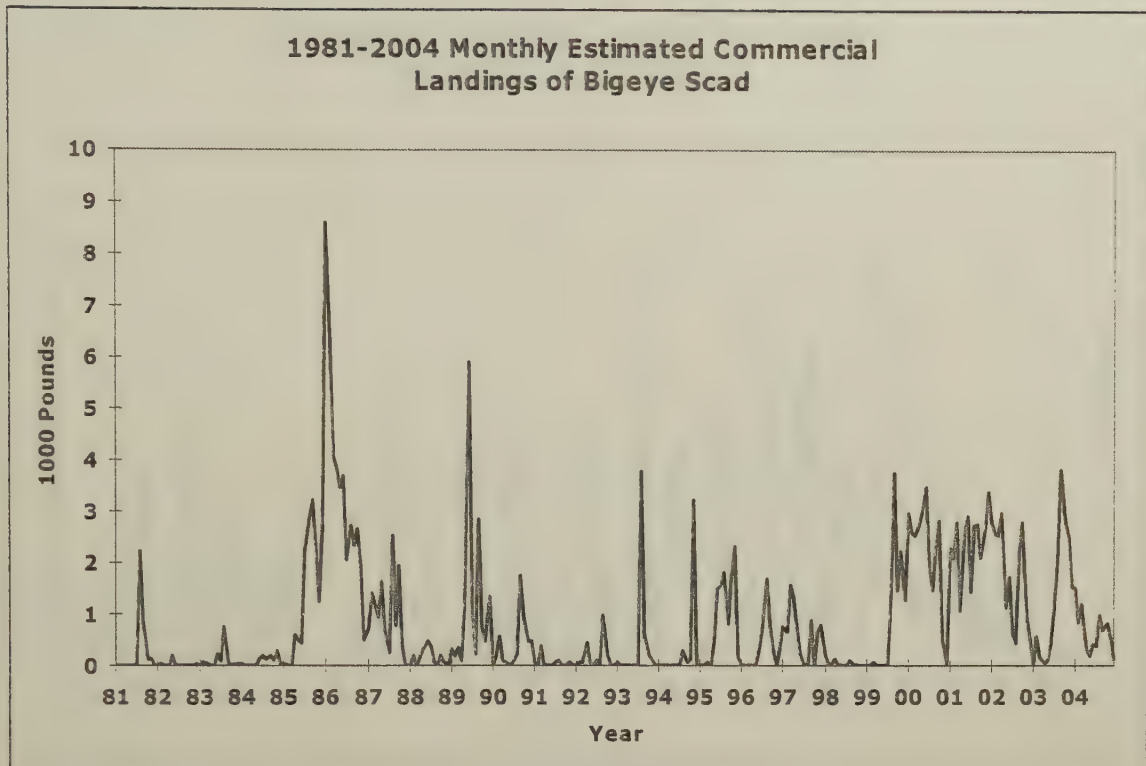


Figure B-4-8

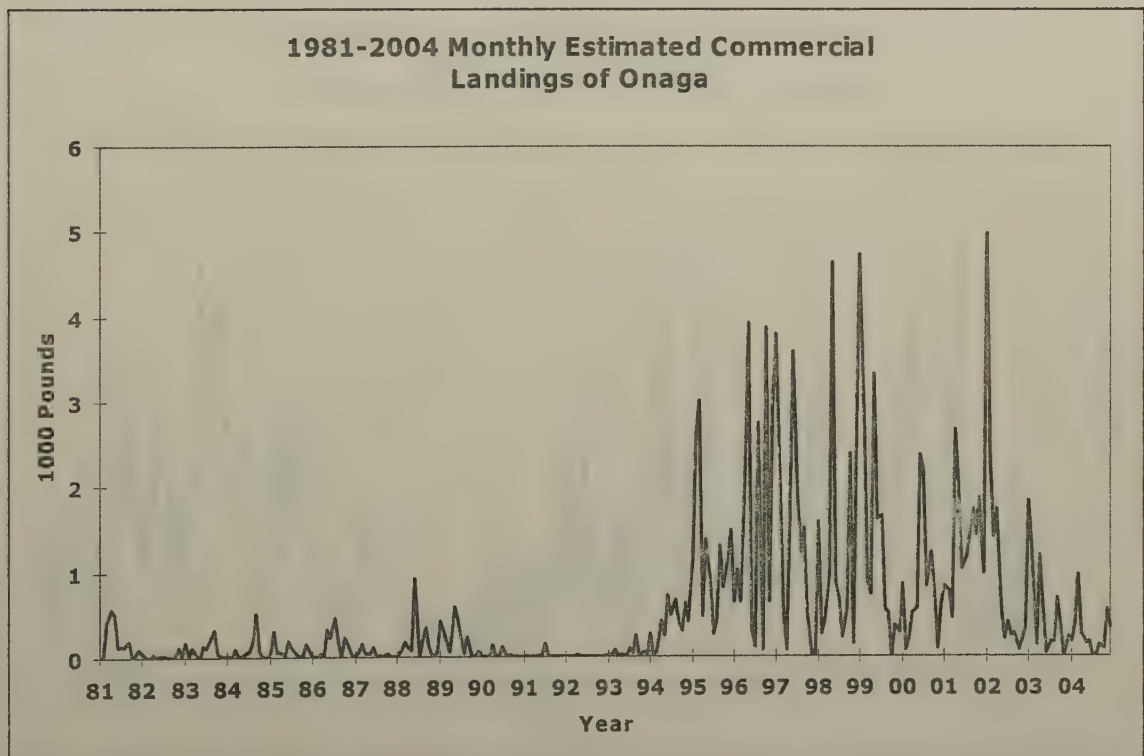


Figure B-4-9

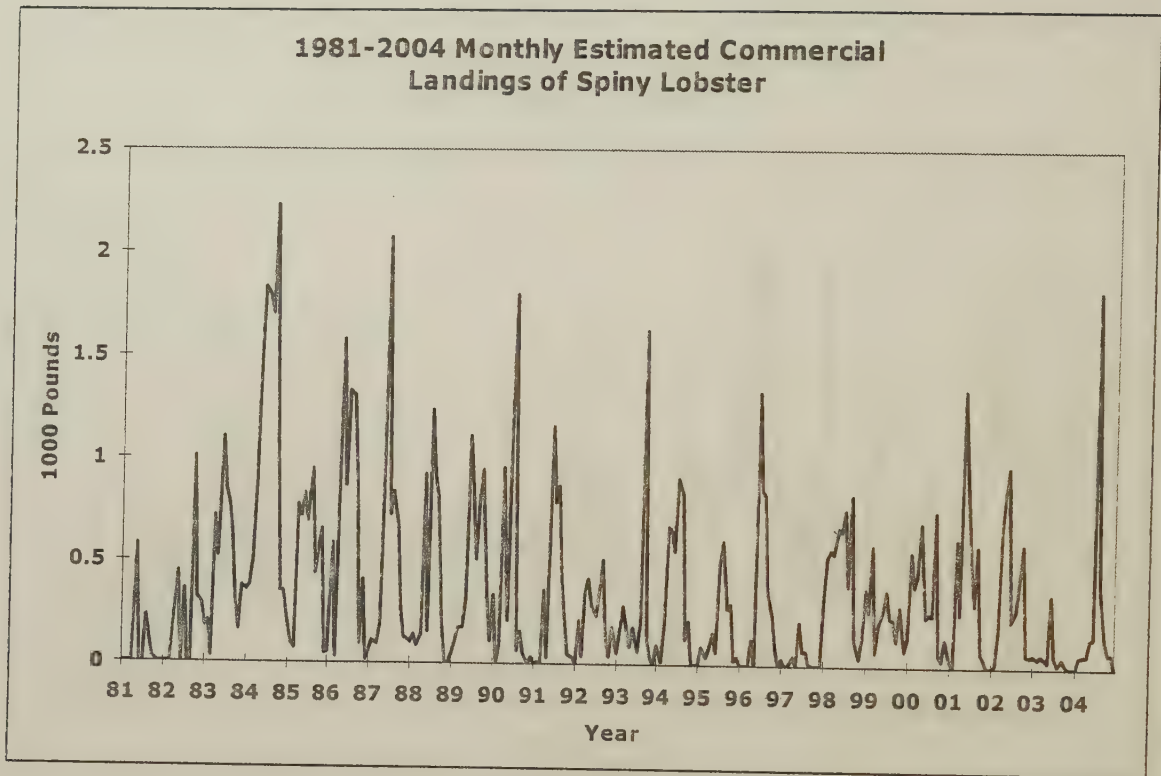


Figure B-4-10

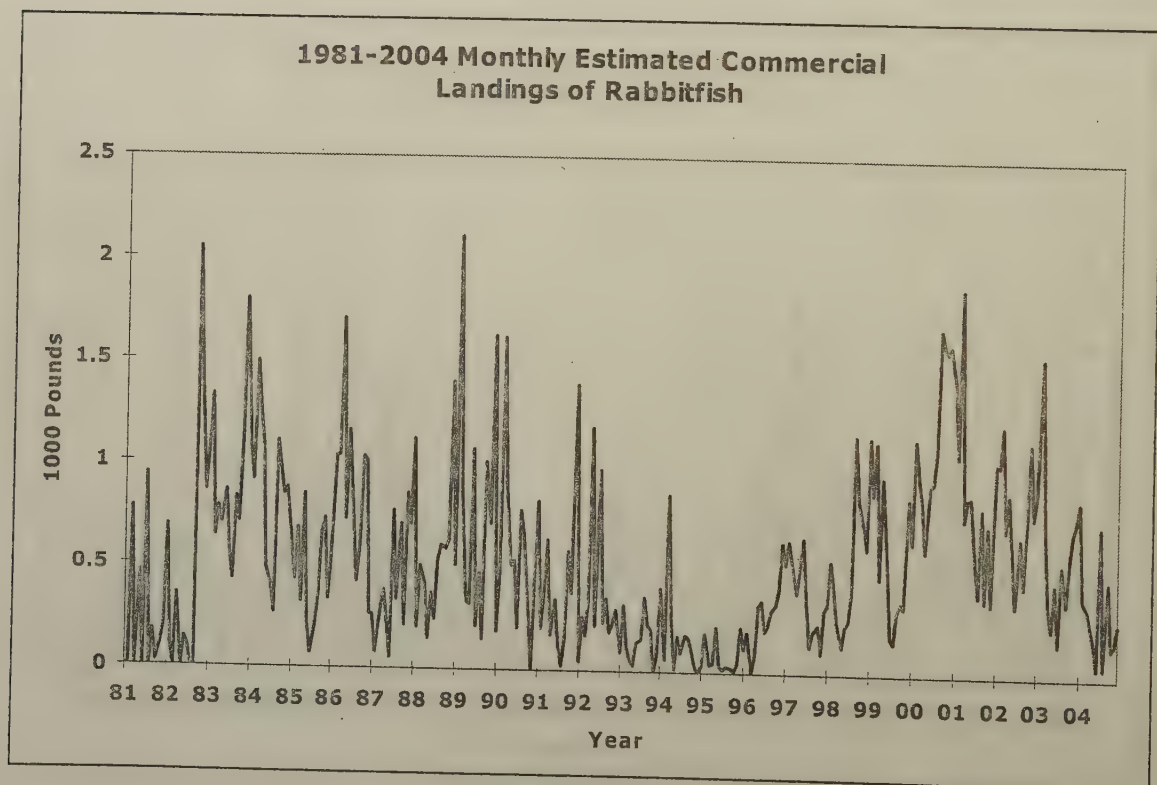


Figure B-4-11

GUAM 2004 FISHERY STATISTICS

Compiled by

Guam Division of Aquatic and Wildlife Resources

and the

Western Pacific Fishery Information Network

June 2006

CONTENTS

	Page
Introduction	C.1
Commercial Landings Data Collecting System	C.1
Commercial Landings Data Processing System	C.2
Commercial Landings Data Reporting System	C.3
Interpretation of Statistics	C.5
Tables	C.6
Figures	C.19

LIST OF GUAM SUMMARY TABLES

Table	Title	Page
C-1	2004 Estimated Commercial Landings	C.6
C-2	January 2004 Estimated Commercial Landings	C.7
C-3	February 2004 Estimated Commercial Landings	C.8
C-4	March 2004 Estimated Commercial Landings	C.9
C-5	April 2004 Estimated Commercial Landings	C.10
C-6	May 2004 Estimated Commercial Landings	C.11
C-7	June 2004 Estimated Commercial Landings	C.12
C-8	July 2004 Estimated Commercial Landings	C.13
C-9	August 2004 Estimated Commercial Landings	C.14
C-10	September 2004 Estimated Commercial Landings	C.15
C-11	October 2004 Estimated Commercial Landings	C.16
C-12	November 2004 Estimated Commercial Landings	C.17
C-13	December 2004 Estimated Commercial Landings	C.18

LIST OF GUAM FIGURES

Figure	Title	Page
C-1-1	2004 Monthly Estimated Commercial Landings of Pelagic, Bottom, Reef, and Other Fish	C.19
C-1-2	2004 Monthly Estimated Commercial Landings of Tunas, PMUS, and BMUS	C.19
C-1-3	2004 Monthly Estimated Commercial Landings of Wahoo, Mahimahi, and Billfish	C.20
C-1-4	2004 Monthly Estimated Commercial Landings of Skipjack, Yellowfin, and Other Tunas	C.20
C-1-5	2004 Monthly Estimated Commercial Landings of Onaga and Bigeye Scad	C.21
C-2-1	1980-2004 Average Monthly Estimated Commercial Landings of Tunas, PMUS, and BMUS	C.21
C-2-2	1980-2004 Average Monthly Estimated Commercial Landings of Wahoo, Mahimahi, and Marlin	C.22
C-2-3	1980-2004 Average Monthly Estimated Commercial Landings of Onaga and Bigeye Scad	C.22
C-2-4	1980-2004 Average Monthly Estimated Commercial Landings of Skipjack, Yellowfin, and Other Tunas	C.23
C-2-5	1980-2004 Average Monthly Estimated Commercial Landings of Miscellaneous Reef Fish and Bottomfish	C.23
C-3-1	1980-2004 Annual Trend of Fisheries Categories: Estimated Commercial Landings of Pelagic, Bottom, Reef, and Other Fish	C.24
C-3-2	1980-2004 Annual Total Estimated Commercial Landings (Pounds and Dollars)	C.24
C-3-3	1980-2004 Annual Estimated Commercial Landings of Tunas, PMUS, and BMUS	C.25
C-3-4	1980-2004 Annual Estimated Commercial Landings of Wahoo, Mahimahi, and Billfish	C.25
C-3-5	1980-2004 Annual Estimated Commercial Landings of Skipjack, Yellowfin, and Other Tunas	C.26
C-3-6	1980-2004 Annual Estimated Commercial Landings of Onaga and Bigeye Scad	C.26
C-3-7	1980-2004 Annual Estimated Commercial Landings of Miscellaneous Reef Fish and Bottomfish	C.27
C-4-1	1980-2004 Monthly Estimated Commercial Landings of Wahoo	C.27
C-4-2	1980-2004 Monthly Estimated Commercial Landings of Mahimahi	C.28
C-4-3	1980-2004 Monthly Estimated Commercial Landings of Marlin	C.28

LIST OF GUAM FIGURES (cont.)

Figure	Title	Page
C-4-4	1980-2004 Monthly Estimated Commercial Landings of Skipjack Tuna	C.29
C-4-5	1980-2004 Monthly Estimated Commercial Landings of Yellowfin Tuna	C.29
C-4-6	1980-2004 Monthly Estimated Commercial Landings of Onaga	C.30
C-4-7	1980-2004 Monthly Estimated Commercial Landings of Bigeye Scad	C.30
C-4-8	1980-2004 Monthly Estimated Commercial Landings of Dogtooth Tuna	C.31
C-4-9	1980-2004 Monthly Estimated Commercial Landings of Reef Fish	C.31
C-4-10	1980-2004 Monthly Estimated Commercial Landings of Bottomfish (Misc)	C.32

GUAM 2004 FISHERY STATISTICS

INTRODUCTION

The Territory of Guam is the southernmost, largest, and most populous island in the Mariana Archipelago.

Location: 13.4°N latitude, 144.4°E longitude

Population: 171,000 (*The World Factbook*, 2006)

Economy: U.S. military and tourism



Guam

source: <http://www.cia.gov/cia/publications/factbook/geos/gg.html>
The World Factbook

Fishing activities on Guam are divided into two basic categories: offshore and inshore fishing. Offshore fishing typically involves small boats (12 to 48 feet) going on 1- to 2-day trolling and bottomfishing trips. They usually originate from one of the three principal harbors located on the west coast and southern tip of the island. Inshore fishing is usually conducted without the use of a boat and consists mostly of nearshore casting, netting, and spearfishing.

In 1982, WPacFIN began working with staff of the Division of Aquatic and Wildlife Resources (DAWR) and with local fish dealers to obtain information on commercial landings through voluntary use of “trip ticket” invoices provided by WPacFIN. The tables and graphs in this section are based on data that are summarized from receipts submitted by all participating dealers on Guam and then adjusted to create the estimated total commercial landings based on an estimated annual percent coverage factor.

COMMERCIAL LANDINGS DATA COLLECTING SYSTEM

There are three sources of fish in Guam’s commercial market: (1) full-time commercial fishermen; (2) part-time commercial fishermen; and (3) subsistence or recreational “expense” fishermen who frequently sell portions of their catch to help defray costs. Licenses are not required to sell fish in Guam, nor are there any reporting requirements for those selling fish.

In July 1979 the Guam Fishermen's Coop was established in Agana through government funding. It subsequently became the central distribution center for fresh local fish. Prior to 1979 there was no central place to sell fish, and fishermen had to develop their own markets and peddle fish after each trip.

In 1982, WPacFIN began working with the Coop to improve their invoicing system and to obtain data on all fish purchases. A cooperative system was established whereby the Coop would use forms and coding schemes designed by WPacFIN and would supply copies of all invoices to WPacFIN for computer data entry. In return, WPacFIN would provide the Coop with document quality control and computer-generated summary statistics. All purchase data back to July 1979 were also coded and computerized. As time progressed, other fish markets began to operate, and DAWR and WPacFIN staff worked with them to obtain data through the voluntary receipt book program.

Although a proposed law has been introduced several times that would require reporting by dealers and possibly commercial fishermen, it has never made it very far through the legislative process, and the commercial landings data collection system remains voluntary.

Data collected on commercial receipts forms include

- | | |
|---------------------------|------------------|
| • Date | • Fisherman Code |
| • Number of Fishermen | • Hours Fished |
| • Area Fished | • Species Caught |
| • Number of Pieces Caught | • Pounds Caught |
| • Price per Pound | |

COMMERCIAL LANDINGS DATA PROCESSING SYSTEM

In earlier years data were processed at the central WPacFIN office in Honolulu. Beginning in 1994, however, DAWR staff took over this task using a computer and software provided by WPacFIN. The processing system for the commercial landings data collected from the fish dealers is fairly straightforward. Dealers complete a purchase form every time they purchase fish from a fisherman. On this form, catches are divided into categories for weighing by species or species group (where practicable, number of pieces is also recorded). Once all the edits, adjustments, verifications, and corrections are made, summary reports are generated. Numerous standard reports are available, but only the monthly and annual landings by species are provided in this document.

COMMERCIAL LANDINGS DATA REPORTING SYSTEM

After completing all editing, adjusting, and quality control activities for the commercial landings data, monthly and annual summary reports by species are generated. Each table contains information on the pounds, value, and the average price per pound for each species or species group. Each monthly report contains a subtotal for the sum of all species combined for that month. Annual reports contain the estimated total landings for each species and the estimated total recorded landings for all species for the calendar year. Included with the estimated commercial landings summary reports are graphs of some of the important statistics.

Please note that commercial landings data have been adjusted to reflect total coverage and are referenced as “Estimated Commercial Landings” in the charts and tables. Also, some of the charts in this volume are new or modified from earlier volumes.

To access the most up-to-date data and charts, please visit the WPacFIN Website at <http://www.pifsc.noaa.gov/wpacfin>.

The following groupings of species, species categories, and abbreviations are used in the tables and graphs for Guam's commercial landings:

Note: Many of the species included in this report have been recategorized over the years. For example, the Magnuson Fishery Conservation and Management Act of 1976 was amended in 1992 to include tunas in the Pelagic Management Unit Species (PMUS) category. However, this FSWP volume will maintain the original species categorizations from previous volumes for comparative purposes. As such, tunas are kept in a separate category.

I. Pelagic Management Unit Species (PMUS)

Mahimahi (dolphin)
 Marlin (probably all blue but possibly striped or black)
 Spearfish
 Sailfish
 Wahoo
 Sharks

II. Bottomfish Management Unit Species (BMUS)

Jacks (unclassified but excluding bigeye scad)
 Amberjack
 Bottomfish (unclassified)
 Ehu (red snapper)
 Gindai (flower snapper)
 Grouper
 Kalekale (pink snapper)

II. Bottomfish Management Unit Species (BMUS) (cont.)

Lehi (silverjaw snapper)
Onaga (red or longtail snapper)
Opakapaka (pink snapper)
Uku (gray snapper)
Emperor (mafute)

III. Billfish

Marlin (probably all blue but possibly striped or black)
Spearfish
Sailfish

IV. Tunas

Tunas (unclassified)
Skipjack tuna
Yellowfin tuna
Dogtooth or white tuna
Kawakawa

V. Other Tuna

All the above tunas excluding skipjack and yellowfin tunas.

VI. Fisheries Categories

A. Pelagic Species

All PMUS and tuna species plus the following:

Troll fish (unclassified)
Barracuda
Rainbow runner

B. Bottomfish

Same as the BMUS

VI. Fisheries Categories (cont.)

C. Reef Fish

Reef fish (unclassified)	Parrotfish
Giant wrasse	Snapper
Rabbitfish	Surgeonfish
Rudderfish	Unicornfish
Squirrelfish	Goatfish

D. Other

Miscellaneous (unclassified)	Coconut crab
Bigeye scad	Lobster
Mullet	Shrimp
Eels	Octopus
Milkfish	Squid
Invertebrates (unclassified)	Seaweeds
Crabs (unclassified)	Imported

INTERPRETATION OF STATISTICS

The user is reminded again to pay heed to the precautions and assumptions identified earlier in this document when making interpretations of or inferences from data reported in the tables and graphs. Remember also that the commercial landings summaries are adjusted numbers based on samples of fishing activities.

Table C-1
2004 Estimated Commercial Landings

Species	Pounds	Value	Price/Lb.
Unknown	5	\$9	\$1.75
Miscellaneous	454	\$1,719	\$3.79
Bigeye scad (atulai)	1,412	\$3,284	\$2.33
Black jack	2,073	\$5,005	\$2.41
Jacks	3,320	\$8,422	\$2.54
Sharks	53	\$139	\$2.63
Bottom fish	106	\$283	\$2.65
Ehu (red snapper)	423	\$1,678	\$3.97
Gindai (flower snapper)	376	\$1,503	\$4.00
Grouper	3,503	\$9,877	\$2.82
Kalikali (pink snapper)	467	\$1,639	\$3.51
Lehi (silverjaw)	269	\$966	\$3.59
Onaga (red snapper)	2,262	\$11,204	\$4.95
Opakapaka (pink snapper)	765	\$3,111	\$4.07
Uku (gray snapper)	2,671	\$6,496	\$2.43
Amberjack	738	\$1,946	\$2.64
Reef fish	56,414	\$164,919	\$2.92
Wrasse	2,102	\$5,460	\$2.60
Rabbitfish	287	\$899	\$3.13
Rudderfish (guilli)	15	\$38	\$2.50
Mafute (emperor)	6,541	\$17,325	\$2.65
Parrotfish	1,296	\$2,737	\$2.11
Snapper	813	\$2,049	\$2.52
Surgeonfish	739	\$1,905	\$2.58
Unicornfish	23,590	\$62,272	\$2.64
Goatfish	606	\$1,591	\$2.63
Troll fish	72	\$168	\$2.33
Barracuda	3,846	\$7,269	\$1.89
Mahi/dolphinfish	74,428	\$112,683	\$1.51
Marlin	32,904	\$32,931	\$1.00
Spearfish	194	\$213	\$1.10
Sailfish	1,448	\$1,703	\$1.18
Rainbow runner	10,282	\$15,970	\$1.55
Monchong	558	\$1,209	\$2.17
Wahoo	64,768	\$126,513	\$1.95
Bonita/skipjack tuna	53,720	\$52,874	\$0.98
Dogtooth tuna	3,649	\$4,105	\$1.13
Yellowfin tuna	35,199	\$68,393	\$1.94
Invertebrates	4	\$13	\$3.75
Crabs (misc)	15	\$46	\$3.00
Lobster	1,966	\$7,241	\$3.68
Octopus	2,330	\$5,871	\$2.52
TOTAL	396,683	\$753,678	\$1.90

Table C-2
January 2004 Estimated Commercial Landings

Species	Pounds	Value	Price/Lb.
Miscellaneous	16	\$41	\$2.50
Bigeye scad (atulai)	1,035	\$2,382	\$2.30
Jacks	315	\$846	\$2.69
Grouper	152	\$436	\$2.87
Lehi (silverjaw)	2	\$7	\$4.00
Onaga (red snapper)	19	\$97	\$5.00
Opakapaka (pink snapper)	13	\$52	\$4.00
Uku (gray snapper)	13	\$29	\$2.25
Reef fish	3,416	\$10,161	\$2.97
Wrasse	276	\$760	\$2.75
Mafute (emperor)	86	\$221	\$2.56
Parrotfish	61	\$184	\$3.00
Snapper	16	\$44	\$2.64
Unicornfish	1,574	\$3,978	\$2.53
Goatfish	88	\$221	\$2.50
Barracuda	158	\$316	\$2.00
Mahi/dolphinfish	15,870	\$24,168	\$1.52
Marlin	1,194	\$1,543	\$1.29
Sailfish	225	\$289	\$1.28
Rainbow runner	285	\$565	\$1.99
Monchong	51	\$114	\$2.25
Wahoo	4,822	\$9,668	\$2.00
Bonita/skipjack tuna	2,616	\$3,150	\$1.20
Dogtooth tuna	460	\$612	\$1.33
Yellowfin tuna	1,555	\$3,346	\$2.15
Invertebrates	4	\$13	\$3.75
Lobster	18	\$68	\$3.75
Octopus	404	\$1,009	\$2.50
TOTAL	34,745	\$64,321	\$1.85

Table C-3
February 2004 Estimated Commercial Landings

Species	Pounds	Value	Price/Lb.
Bigeye scad (atulai)	15	\$46	\$3.00
Jacks	132	\$331	\$2.51
Ehu (red snapper)	27	\$108	\$4.00
Grouper	20	\$54	\$2.76
Lehi (silverjaw)	58	\$221	\$3.83
Onaga (red snapper)	34	\$171	\$5.00
Opakapaka (pink snapper)	47	\$227	\$4.83
Uku (gray snapper)	2	\$7	\$3.00
Reef fish	2,984	\$8,866	\$2.97
Rabbitfish	7	\$21	\$3.00
Mafute (emperor)	104	\$285	\$2.75
Unicornfish	756	\$2,206	\$2.92
Barracuda	762	\$1,350	\$1.77
Mahi/dolphinfish	18,983	\$28,898	\$1.52
Marlin	1,092	\$1,476	\$1.35
Spearfish	25	\$32	\$1.25
Sailfish	20	\$20	\$1.00
Rainbow runner	388	\$738	\$1.90
Monchong	11	\$25	\$2.25
Wahoo	5,838	\$11,633	\$1.99
Bonita/skipjack tuna	1,762	\$2,191	\$1.24
Dogtooth tuna	186	\$226	\$1.22
Yellowfin tuna	862	\$1,656	\$1.92
Lobster	23	\$86	\$3.73
Octopus	79	\$199	\$2.50
TOTAL	34,219	\$61,072	\$1.78

Table C-4
March 2004 Estimated Commercial Landings

Species	Pounds	Value	Price/Lb.
Miscellaneous	418	\$1,627	\$3.89
Bigeye scad (atulai)	82	\$165	\$2.00
Black jack	41	\$107	\$2.60
Jacks	175	\$436	\$2.49
Sharks	22	\$60	\$2.75
Bottom fish	5	\$15	\$2.75
Ehu (red snapper)	2	\$9	\$4.00
Gindai (flower snapper)	51	\$202	\$4.00
Grouper	85	\$256	\$3.00
Kalikali (pink snapper)	6	\$18	\$3.00
Lehi (silverjaw)	52	\$181	\$3.50
Onaga (red snapper)	159	\$794	\$5.00
Uku (gray snapper)	21	\$55	\$2.62
Amberjack	36	\$100	\$2.80
Reef fish	5,265	\$15,092	\$2.87
Wrasse	47	\$129	\$2.75
Mafute (emperor)	165	\$453	\$2.75
Parrotfish	6	\$19	\$3.00
Snapper	26	\$65	\$2.46
Surgeonfish	9	\$21	\$2.25
Unicornfish	2,252	\$6,182	\$2.75
Goatfish	261	\$744	\$2.85
Troll fish	9	\$19	\$2.00
Barracuda	594	\$1,187	\$2.00
Mahi/dolphinfish	12,959	\$19,439	\$1.50
Marlin	1,292	\$1,358	\$1.05
Spearfish	27	\$34	\$1.25
Sailfish	82	\$103	\$1.25
Rainbow runner	284	\$477	\$1.68
Monchong	14	\$30	\$2.25
Wahoo	9,338	\$18,625	\$1.99
Bonita/skipjack tuna	5,577	\$5,454	\$0.98
Dogtooth tuna	331	\$377	\$1.14
Yellowfin tuna	2,288	\$4,592	\$2.01
Lobster	63	\$236	\$3.75
Octopus	47	\$122	\$2.58
TOTAL	42,093	\$78,784	\$1.87

Table C-5
April 2004 Estimated Commercial Landings

Species	Pounds	Value	Price/Lb.
Bigeye scad (atulai)	35	\$71	\$2.00
Jacks	238	\$611	\$2.57
Ehu (red snapper)	5	\$19	\$4.00
Gindai (flower snapper)	6	\$24	\$4.00
Grouper	51	\$145	\$2.88
Lehi (silverjaw)	8	\$29	\$3.50
Onaga (red snapper)	79	\$394	\$5.00
Uku (gray snapper)	27	\$69	\$2.57
Reef fish	4,576	\$13,097	\$2.86
Mafute (emperor)	94	\$263	\$2.81
Surgeonfish	33	\$82	\$2.50
Unicornfish	1,975	\$5,361	\$2.71
Barracuda	254	\$508	\$2.00
Mahi/dolphinfish	8,678	\$12,990	\$1.50
Marlin	4,050	\$4,201	\$1.04
Sailfish	35	\$35	\$1.00
Rainbow runner	719	\$1,081	\$1.50
Wahoo	10,676	\$20,802	\$1.95
Bonita/skipjack tuna	2,321	\$2,324	\$1.00
Dogtooth tuna	205	\$238	\$1.16
Yellowfin tuna	2,201	\$4,669	\$2.12
Lobster	58	\$218	\$3.75
Octopus	12	\$34	\$2.74
TOTAL	36,336	\$67,262	\$1.85

Table C-6
May 2004 Estimated Commercial Landings

Species	Pounds	Value	Price/Lb.
Jacks	276	\$694	\$2.51
Ehu (red snapper)	3	\$12	\$4.00
Grouper	392	\$1,160	\$2.96
Kalikali (pink snapper)	17	\$51	\$3.00
Lehi (silverjaw)	30	\$105	\$3.50
Onaga (red snapper)	148	\$741	\$5.00
Opakapaka (pink snapper)	26	\$106	\$4.00
Uku (gray snapper)	270	\$729	\$2.70
Amberjack	2	\$7	\$3.00
Reef fish	3,605	\$10,692	\$2.97
Wrasse	51	\$139	\$2.75
Rabbitfish	26	\$78	\$3.00
Mafute (emperor)	925	\$2,541	\$2.75
Snapper	125	\$309	\$2.47
Surgeonfish	98	\$278	\$2.85
Unicornfish	2,376	\$6,354	\$2.67
Troll fish	16	\$32	\$2.00
Barracuda	228	\$456	\$2.00
Mahi/dolphinfish	1,647	\$2,711	\$1.65
Marlin	3,547	\$4,295	\$1.21
Sailfish	55	\$69	\$1.25
Rainbow runner	1,860	\$2,871	\$1.54
Wahoo	1,451	\$3,145	\$2.17
Bonita/skipjack tuna	8,041	\$7,796	\$0.97
Dogtooth tuna	211	\$255	\$1.21
Yellowfin tuna	3,849	\$7,599	\$1.97
Lobster	113	\$417	\$3.68
Octopus	36	\$91	\$2.50
TOTAL	29,424	\$53,733	\$1.83

Table C-7
June 2004 Estimated Commercial Landings

Species	Pounds	Value	Price/Lb.
Black jack	206	\$517	\$2.51
Jacks	228	\$573	\$2.51
Ehu (red snapper)	50	\$200	\$4.00
Gindai (flower snapper)	16	\$66	\$4.00
Grouper	219	\$649	\$2.96
Kalikali (pink snapper)	10	\$30	\$3.00
Lehi (silverjaw)	28	\$99	\$3.50
Onaga (red snapper)	69	\$344	\$5.00
Opakapaka (pink snapper)	34	\$136	\$4.00
Uku (gray snapper)	260	\$639	\$2.46
Amberjack	14	\$42	\$3.00
Reef fish	5,645	\$16,257	\$2.88
Wrasse	31	\$78	\$2.50
Rabbitfish	94	\$471	\$5.00
Mafute (emperor)	1,452	\$3,871	\$2.67
Parrotfish	948	\$1,974	\$2.08
Snapper	190	\$479	\$2.52
Surgeonfish	189	\$503	\$2.66
Unicornfish	2,059	\$5,240	\$2.54
Barracuda	239	\$470	\$1.97
Mahi/dolphinfish	294	\$480	\$1.63
Marlin	2,599	\$2,778	\$1.07
Rainbow runner	1,461	\$2,191	\$1.50
Monchong	12	\$29	\$2.50
Wahoo	1,161	\$2,269	\$1.95
Bonita/skipjack tuna	4,772	\$4,311	\$0.90
Dogtooth tuna	349	\$409	\$1.17
Yellowfin tuna	4,749	\$9,087	\$1.91
Lobster	171	\$642	\$3.75
Octopus	103	\$266	\$2.58
TOTAL	27,654	\$55,101	\$1.99

Table C-8
July 2004 Estimated Commercial Landings

Species	Pounds	Value	Price/Lb.
Bigeye scad (atulai)	6	\$16	\$2.75
Black jack	774	\$1,819	\$2.35
Jacks	488	\$1,243	\$2.55
Sharks	5	\$13	\$2.75
Bottom fish	59	\$147	\$2.47
Ehu (red snapper)	121	\$485	\$4.00
Gindai (flower snap)	128	\$510	\$4.00
Grouper	1,086	\$3,021	\$2.78
Kalikali (pink snapper)	184	\$555	\$3.02
Lehi (silverjaw)	7	\$25	\$3.50
Onaga (red snapper)	378	\$1,888	\$5.00
Opakapaka (pink snapper)	86	\$344	\$4.00
Uku (gray snapper)	741	\$1,787	\$2.41
Amberjack	215	\$503	\$2.33
Reef fish	5,949	\$17,377	\$2.92
Wrasse	185	\$508	\$2.75
Rabbitfish	99	\$168	\$1.70
Mafute (emperor)	1,710	\$4,523	\$2.65
Snapper	206	\$528	\$2.57
Unicornfish	2,584	\$6,457	\$2.50
Goatfish	6	\$17	\$3.00
Barracuda	254	\$507	\$2.00
Mahi/dolphinfish	121	\$205	\$1.69
Marlin	7,901	\$7,183	\$0.91
Sailfish	224	\$321	\$1.44
Rainbow runner	2,381	\$3,569	\$1.50
Monchong	246	\$503	\$2.04
Wahoo	1,949	\$3,885	\$1.99
Bonita/skipjack tuna	8,078	\$7,127	\$0.88
Dogtooth tuna	595	\$635	\$1.07
Yellowfin tuna	8,084	\$14,707	\$1.82
Lobster	252	\$933	\$3.71
Octopus	129	\$324	\$2.50
TOTAL	45,228	\$81,832	\$1.81

Table C-9
August 2004 Estimated Commercial Landings

Species	Pounds	Value	Price/Lb.
Bigeye scad (atulai)	11	\$25	\$2.25
Black jack	29	\$70	\$2.38
Jacks	155	\$389	\$2.52
Ehu (red snapper)	2	\$9	\$4.00
Gindai (flower snapper)	8	\$31	\$4.00
Grouper	209	\$519	\$2.48
Kalikali (pink snapper)	11	\$32	\$3.00
Onaga (red snapper)	20	\$100	\$5.00
Opakapaka (pink snapper)	14	\$54	\$4.00
Uku (gray snapper)	88	\$208	\$2.38
Reef fish	3,069	\$9,086	\$2.96
Wrasse	400	\$1,023	\$2.56
Mafute (emperor)	53	\$142	\$2.68
Snapper	35	\$84	\$2.38
Surgeonfish	45	\$134	\$3.00
Unicornfish	1,088	\$2,984	\$2.74
Barracuda	166	\$333	\$2.00
Mahi/dolphinfish	383	\$585	\$1.53
Marlin	5,207	\$4,133	\$0.79
Rainbow runner	381	\$572	\$1.50
Wahoo	796	\$1,635	\$2.05
Bonita/skipjack tuna	4,991	\$4,768	\$0.96
Dogtooth tuna	100	\$100	\$1.00
Yellowfin tuna	2,616	\$4,815	\$1.84
Lobster	158	\$591	\$3.75
Octopus	271	\$678	\$2.50
TOTAL	20,307	\$33,101	\$1.63

Table C-10
September 2004 Estimated Commercial Landings

Species	Pounds	Value	Price/Lb.
Miscellaneous	7	\$18	\$2.50
Bigeye scad (atulai)	149	\$383	\$2.56
Black jack	711	\$1,760	\$2.47
Jacks	703	\$1,813	\$2.58
Sharks	14	\$34	\$2.50
Bottom fish	23	\$49	\$2.13
Ehu (red snapper)	96	\$372	\$3.86
Gindai (flower snapper)	85	\$341	\$4.00
Grouper	763	\$2,167	\$2.84
Kalikali (pink snapper)	36	\$108	\$3.00
Lehi (silverjaw)	25	\$91	\$3.60
Onaga (red snapper)	291	\$1,453	\$5.00
Opakapaka (pink snapper)	214	\$833	\$3.90
Uku (gray snapper)	879	\$2,129	\$2.42
Amberjack	253	\$599	\$2.37
Reef fish	4,905	\$14,520	\$2.96
Wrasse	476	\$1,184	\$2.49
Rabbitfish	37	\$111	\$3.00
Mafute (emperor)	1,405	\$3,625	\$2.58
Parrotfish	280	\$560	\$2.00
Snapper	119	\$315	\$2.65
Surgeonfish	135	\$317	\$2.34
Unicornfish	4,140	\$10,953	\$2.65
Troll fish	47	\$118	\$2.50
Barracuda	213	\$416	\$1.95
Mahi/dolphinfish	344	\$567	\$1.65
Marlin	2,598	\$2,592	\$1.00
Sailfish	141	\$163	\$1.16
Rainbow runner	1,401	\$2,101	\$1.50
Monchong	101	\$226	\$2.25
Wahoo	4,522	\$9,050	\$2.00
Bonita/skipjack tuna	3,808	\$3,720	\$0.98
Dogtooth tuna	608	\$626	\$1.03
Yellowfin tuna	3,035	\$5,885	\$1.94
Crabs (misc)	6	\$19	\$3.00
Lobster	458	\$1,724	\$3.77
Octopus	206	\$533	\$2.59
TOTAL	33,233	\$71,473	\$2.15

Table C-11
October 2004 Estimated Commercial Landings

Species	Pounds	Value	Price/Lb.
Bigeye scad (atulai)	9	\$26	\$2.75
Black jack	108	\$257	\$2.39
Jacks	302	\$715	\$2.37
Bottom fish	5	\$19	\$3.50
Ehu (red snapper)	41	\$165	\$4.00
Gindai (flower snapper)	73	\$292	\$4.00
Grouper	329	\$907	\$2.75
Kalikali (pink snapper)	48	\$143	\$3.00
Lehi (silverjaw)	28	\$102	\$3.60
Onaga (red snapper)	205	\$1,024	\$5.00
Opakapaka (pink snapper)	195	\$779	\$4.00
Uku (gray snapper)	233	\$522	\$2.24
Amberjack	15	\$42	\$2.77
Reef fish	5,531	\$16,284	\$2.94
Wrasse	362	\$928	\$2.56
Rudderfish (guilli)	15	\$38	\$2.50
Mafute (emperor)	116	\$307	\$2.65
Snapper	20	\$55	\$2.75
Surgeonfish	76	\$177	\$2.33
Unicornfish	1,589	\$4,136	\$2.60
Goatfish	32	\$81	\$2.50
Barracuda	268	\$514	\$1.92
Mahi/dolphinfish	915	\$1,558	\$1.70
Marlin	2,062	\$1,864	\$0.90
Sailfish	381	\$325	\$0.85
Rainbow runner	325	\$544	\$1.67
Wahoo	4,936	\$9,385	\$1.90
Bonita/skipjack tuna	4,478	\$4,414	\$0.99
Dogtooth tuna	149	\$149	\$1.00
Yellowfin tuna	1,977	\$4,214	\$2.13
Lobster	286	\$1,012	\$3.54
Octopus	142	\$356	\$2.50
TOTAL	25,253	\$51,331	\$2.03

Table C-12
November 2004 Estimated Commercial Landings

Species	Pounds	Value	Price/Lb.
Unknown	5	\$9	\$1.75
Miscellaneous	12	\$34	\$2.71
Black jack	204	\$474	\$2.33
Jacks	184	\$479	\$2.61
Sharks	13	\$32	\$2.50
Bottom fish	14	\$54	\$4.00
Ehu (red snapper)	33	\$132	\$4.00
Gindai (flower snapper)	9	\$38	\$4.00
Grouper	197	\$562	\$2.85
Kalikali (pink snapper)	156	\$703	\$4.51
Lehi (silverjaw)	31	\$107	\$3.50
Onaga (red snapper)	341	\$1,706	\$5.00
Opakapaka (pink snapper)	99	\$392	\$3.96
Uku (gray snapper)	136	\$320	\$2.34
Amberjack	202	\$653	\$3.23
Reef fish	4,939	\$14,398	\$2.92
Wrasse	236	\$626	\$2.65
Rabbitfish	22	\$45	\$2.00
Mafute (emperor)	358	\$920	\$2.57
Snapper	54	\$123	\$2.29
Surgeonfish	88	\$229	\$2.60
Unicornfish	1,950	\$5,134	\$2.63
Goatfish	149	\$372	\$2.50
Barracuda	289	\$551	\$1.91
Mahi/dolphinfish	4,245	\$6,230	\$1.47
Marlin	1,261	\$1,346	\$1.07
Spearfish	87	\$87	\$1.00
Sailfish	241	\$334	\$1.38
Rainbow runner	509	\$782	\$1.53
Monchong	54	\$120	\$2.25
Wahoo	11,754	\$21,885	\$1.86
Bonita/skipjack tuna	3,953	\$4,195	\$1.06
Dogtooth tuna	281	\$287	\$1.02
Yellowfin tuna	2,831	\$5,470	\$1.93
Crabs (misc)	9	\$26	\$3.00
Lobster	236	\$877	\$3.72
Octopus	409	\$1,026	\$2.51
TOTAL	35,592	\$70,759	\$1.99

Table C-13
December 2004 Estimated Commercial Landings

Species	Pounds	Value	Price/Lb.
Bigeye scad (atulai)	68	\$171	\$2.50
Jacks	125	\$293	\$2.34
Ehu (red snapper)	42	\$167	\$4.00
Onaga (red snapper)	520	\$2,492	\$4.79
Opakapaka (pink snapper)	38	\$188	\$5.00
Reef fish	6,529	\$19,089	\$2.92
Wrasse	37	\$83	\$2.25
Rabbitfish	2	\$5	\$3.00
Mafute (emperor)	75	\$175	\$2.32
Snapper	21	\$48	\$2.25
Surgeonfish	66	\$165	\$2.50
Unicornfish	1,247	\$3,287	\$2.64
Goatfish	69	\$156	\$2.25
Barracuda	422	\$661	\$1.57
Mahi/dolphinfish	9,988	\$14,853	\$1.49
Marlin	101	\$161	\$1.60
Spearfish	55	\$61	\$1.11
Sailfish	44	\$44	\$1.00
Rainbow runner	288	\$480	\$1.67
Monchong	71	\$160	\$2.25
Wahoo	7,523	\$14,530	\$1.93
Bonita/skipjack tuna	3,323	\$3,425	\$1.03
Dogtooth tuna	175	\$192	\$1.10
Yellowfin tuna	1,152	\$2,353	\$2.04
Lobster	130	\$436	\$3.36
Octopus	490	\$1,235	\$2.52
TOTAL	32,600	\$64,909	\$1.99

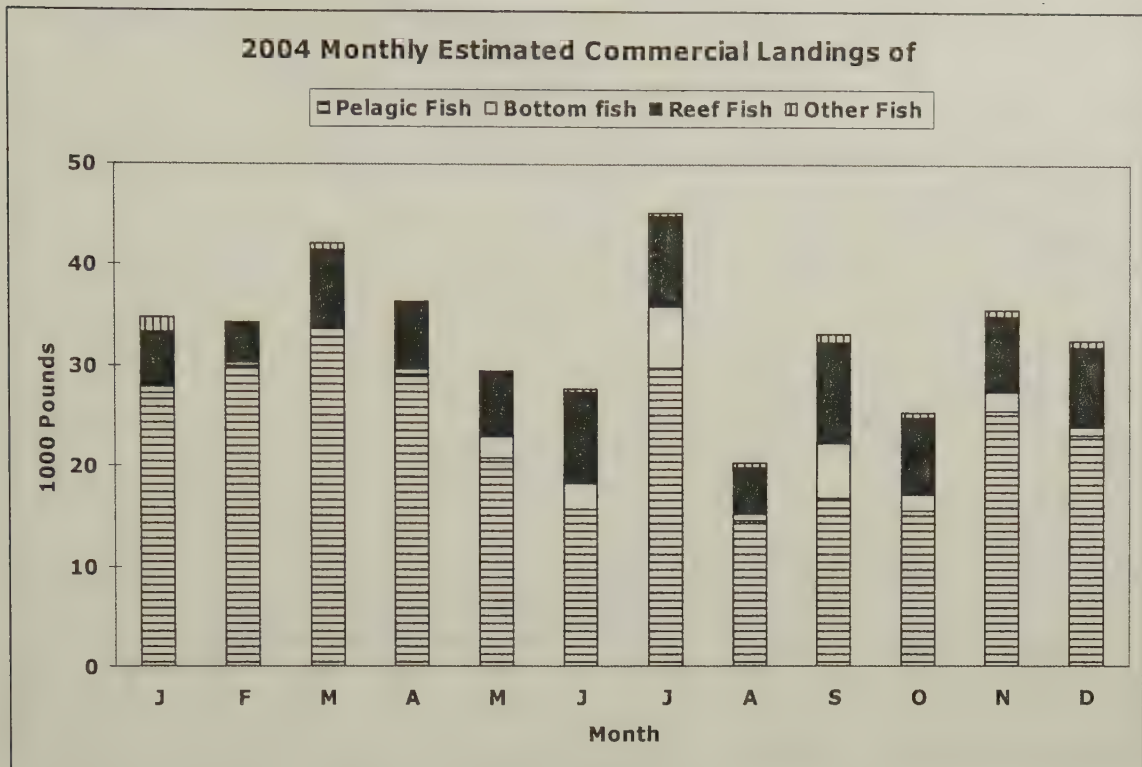


Figure C-1-1

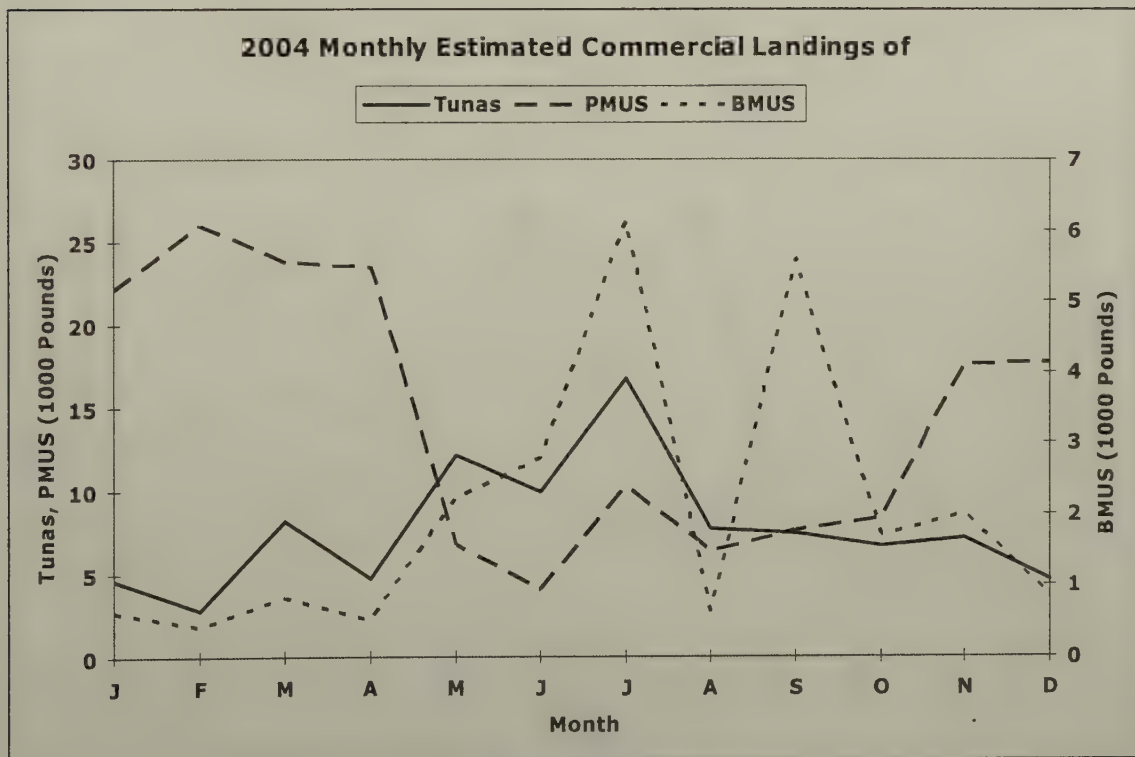


Figure C-1-2

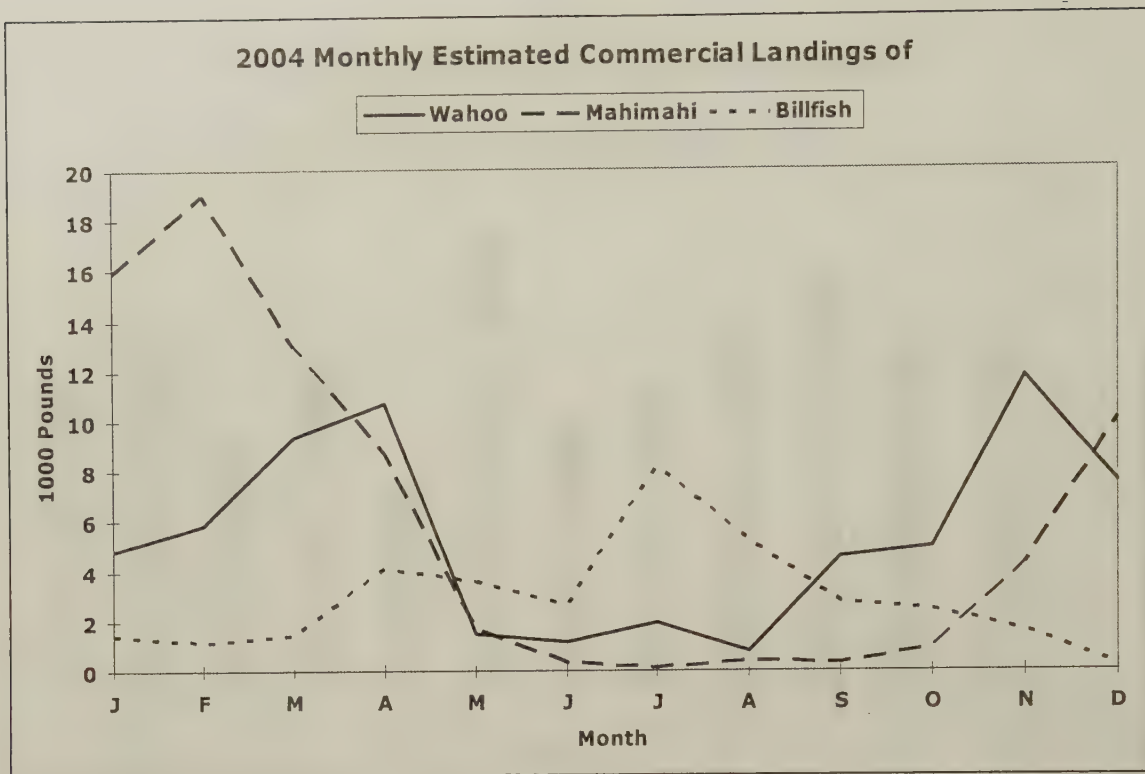


Figure C-1-3

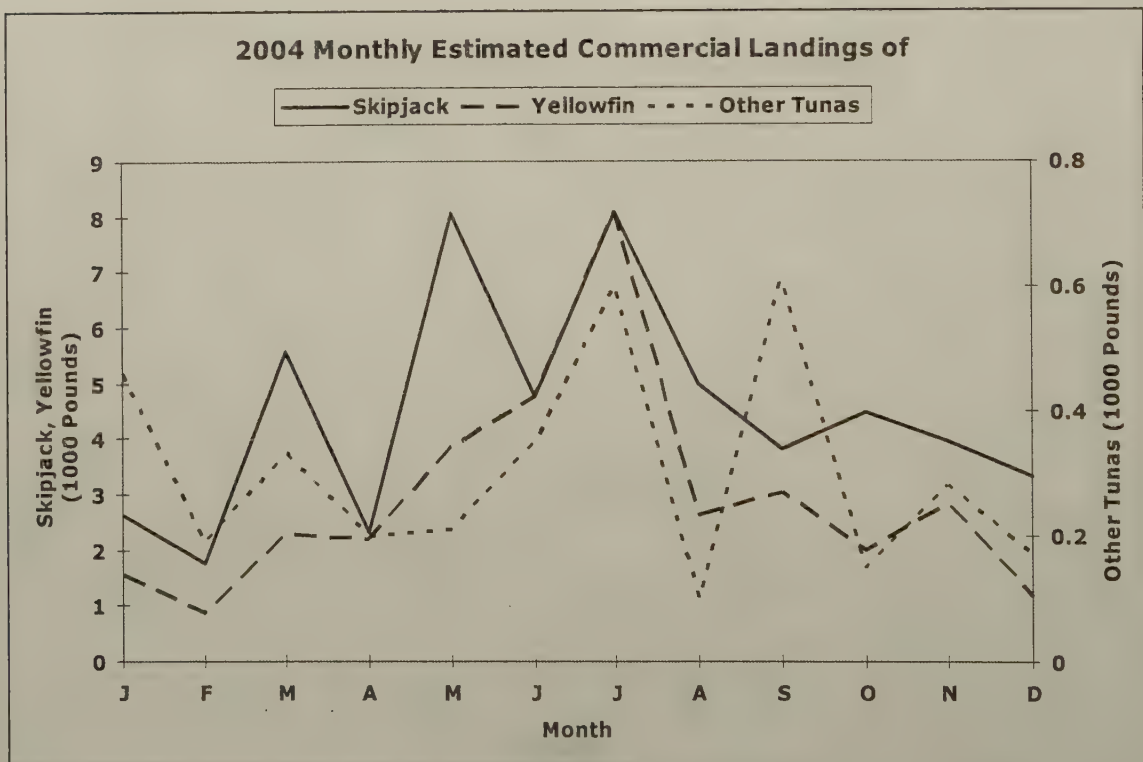


Figure C-1-4

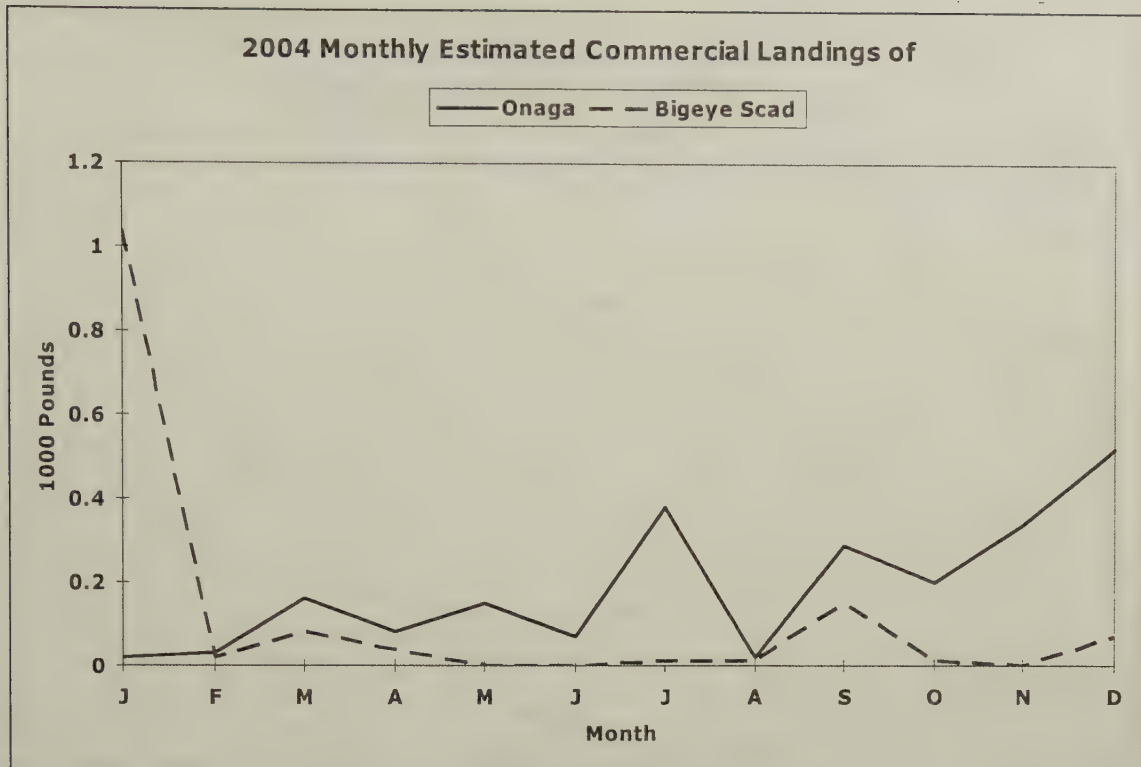


Figure C-1-5

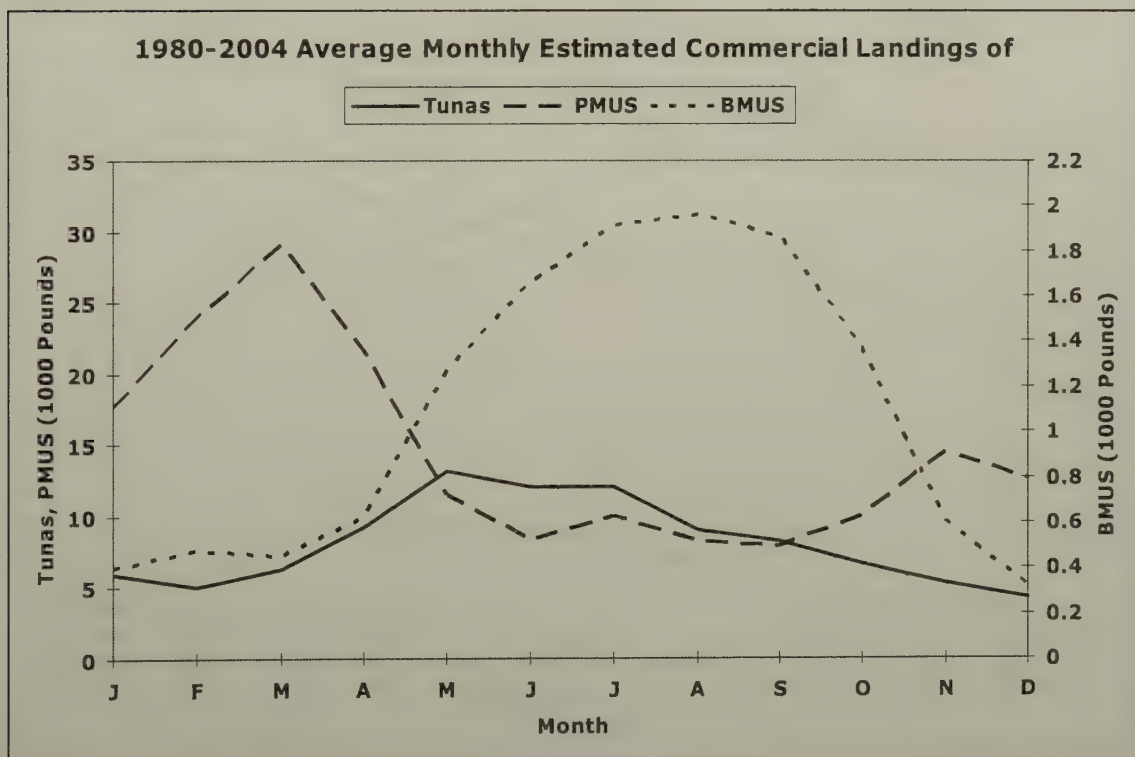


Figure C-2-1

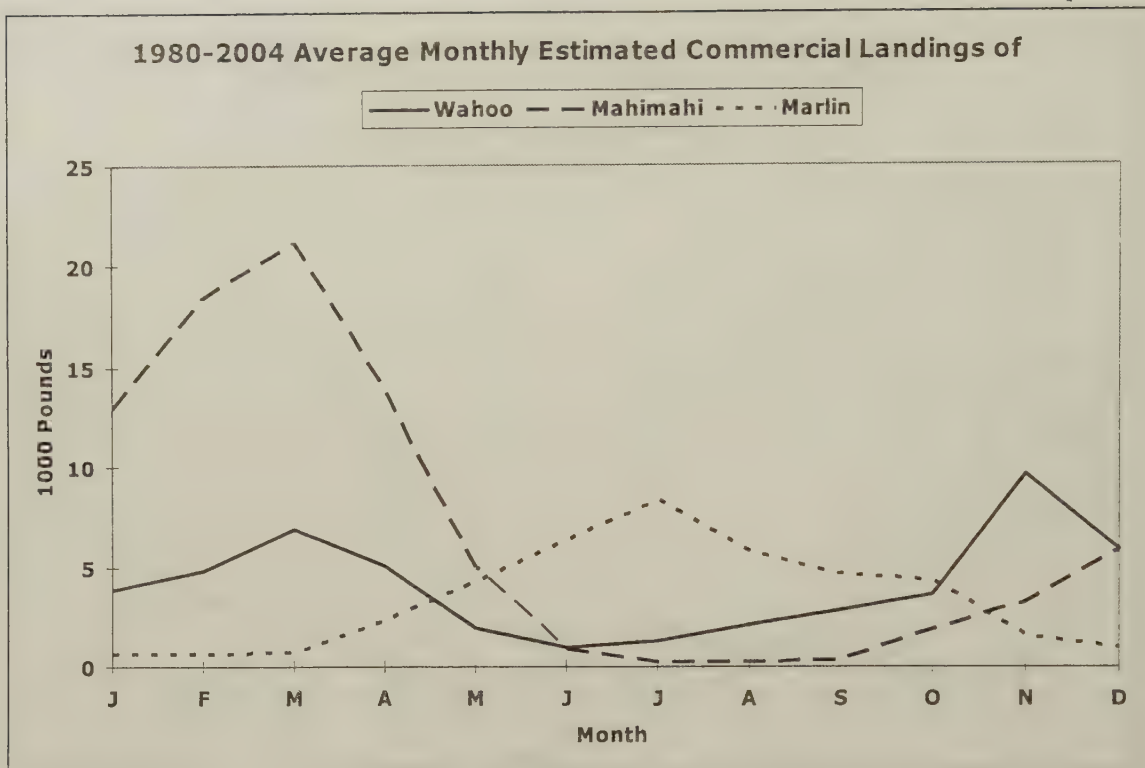


Figure C-2-2

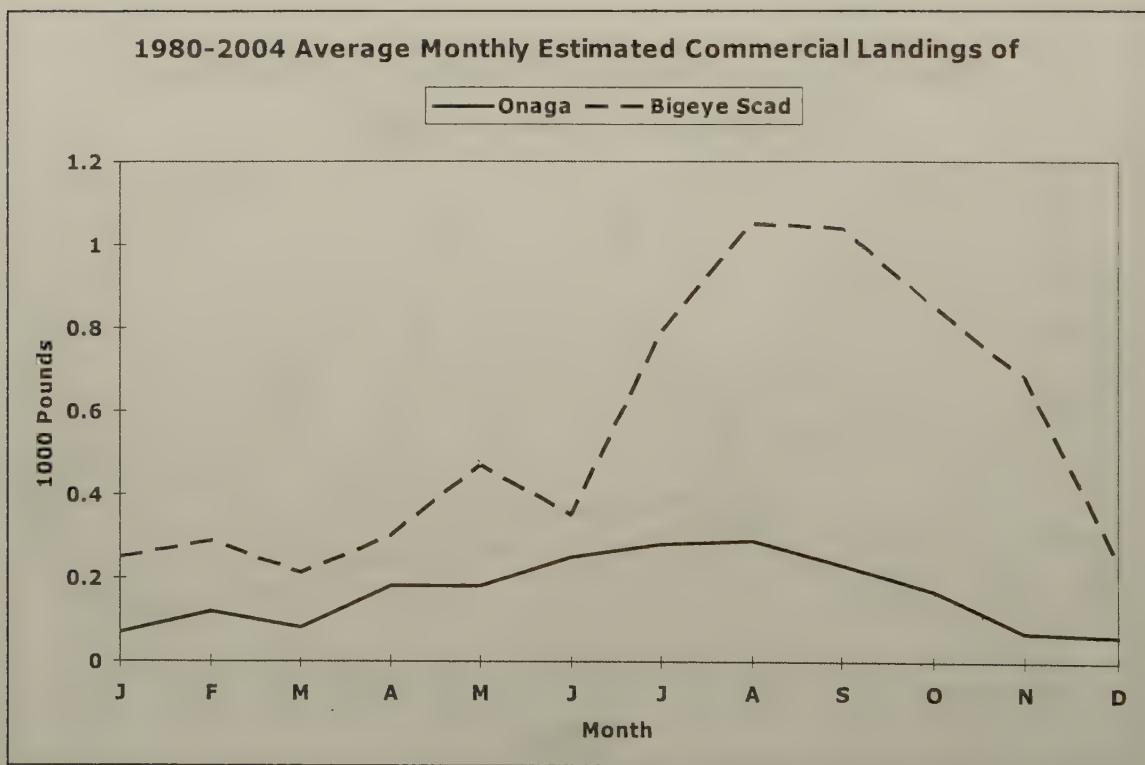


Figure C-2-3

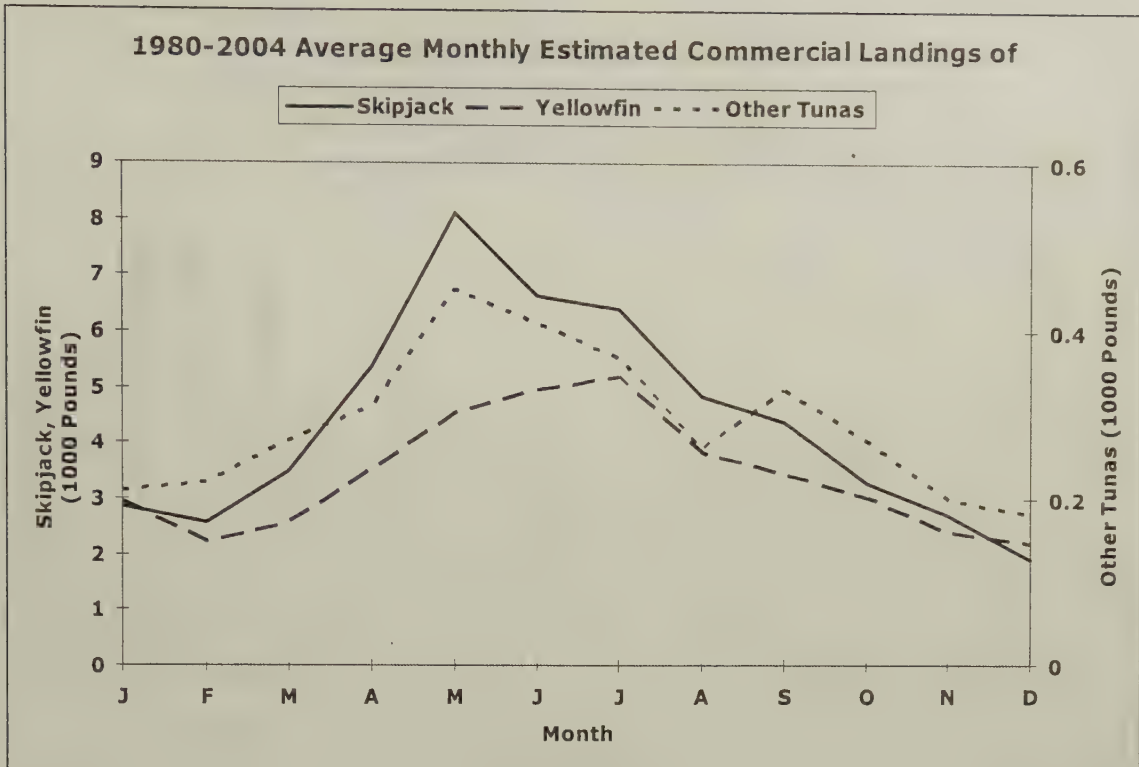


Figure C-2-4

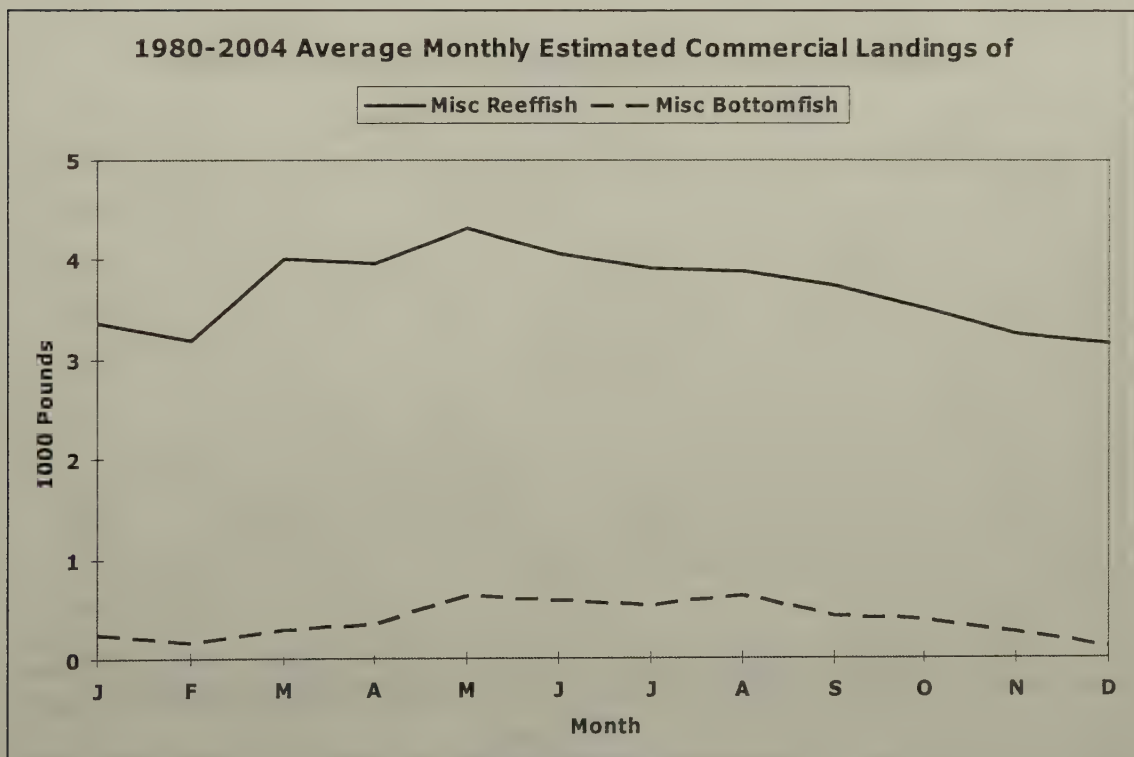


Figure C-2-5

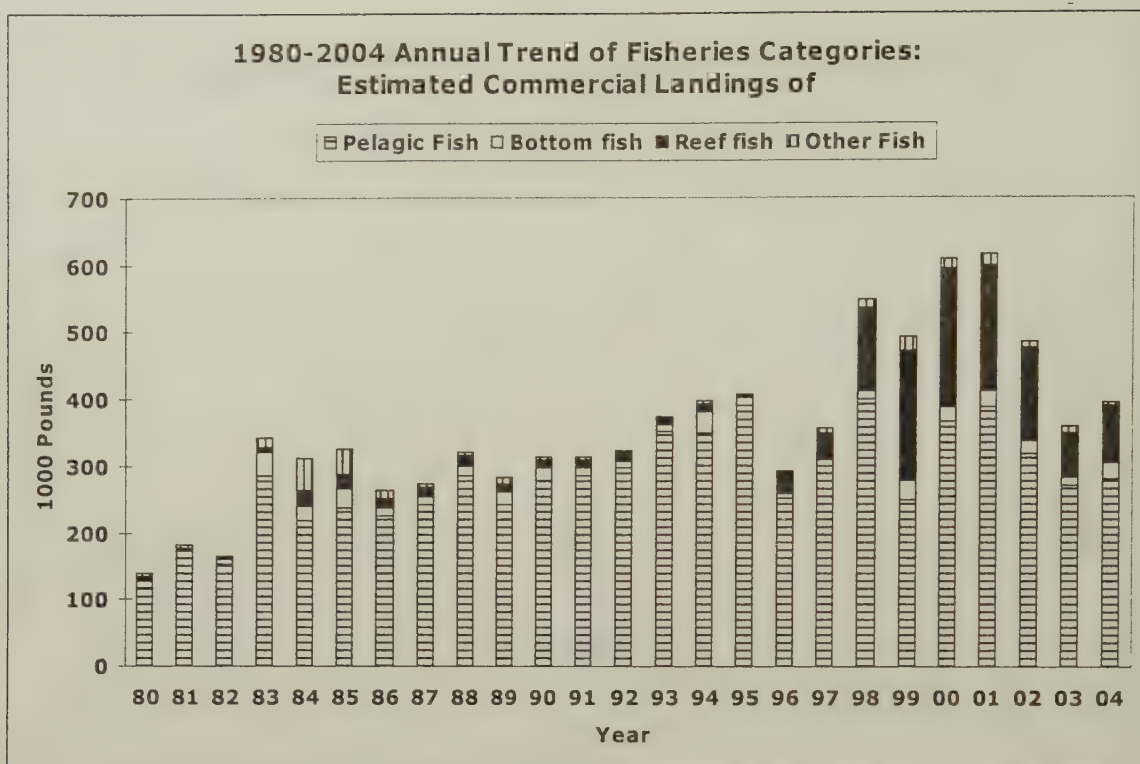


Figure C-3-1

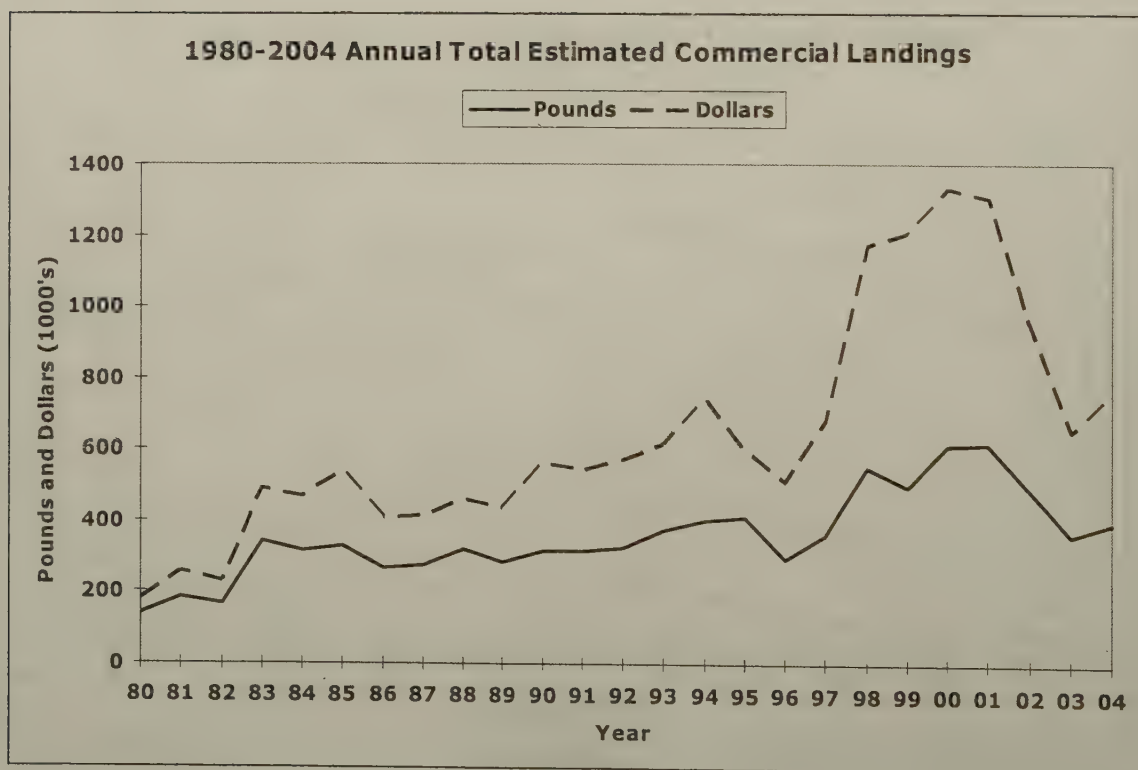


Figure C-3-2

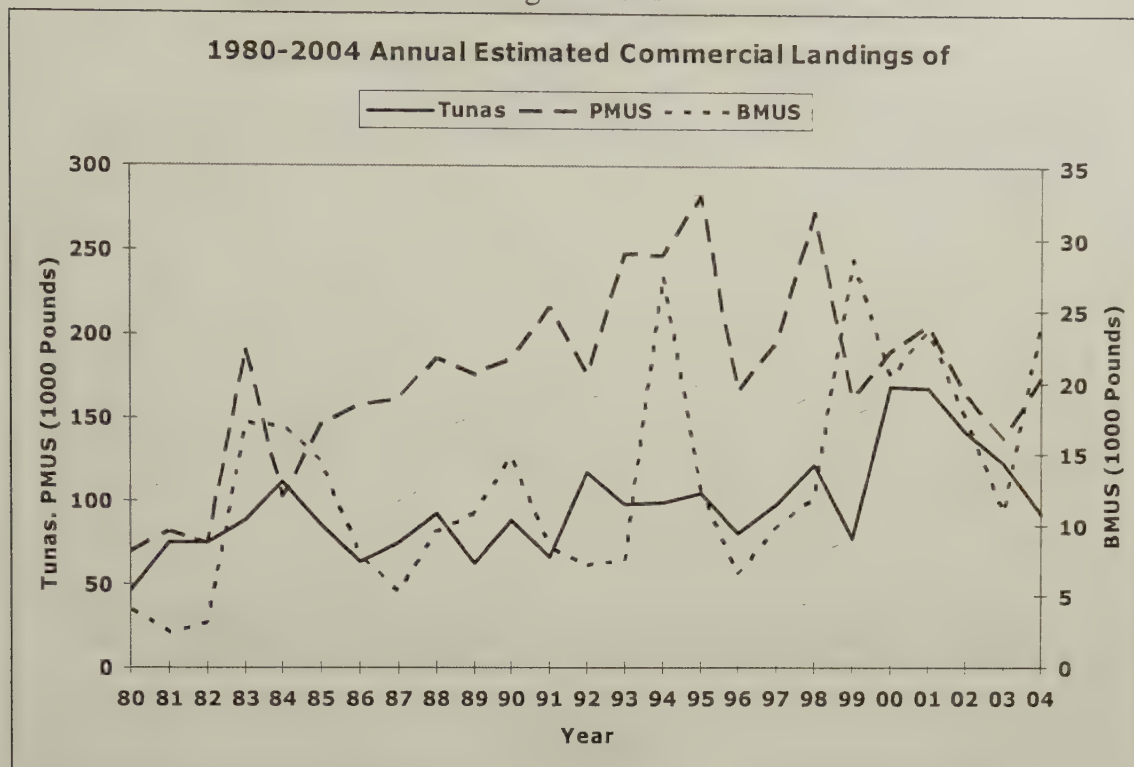


Figure C-3-3

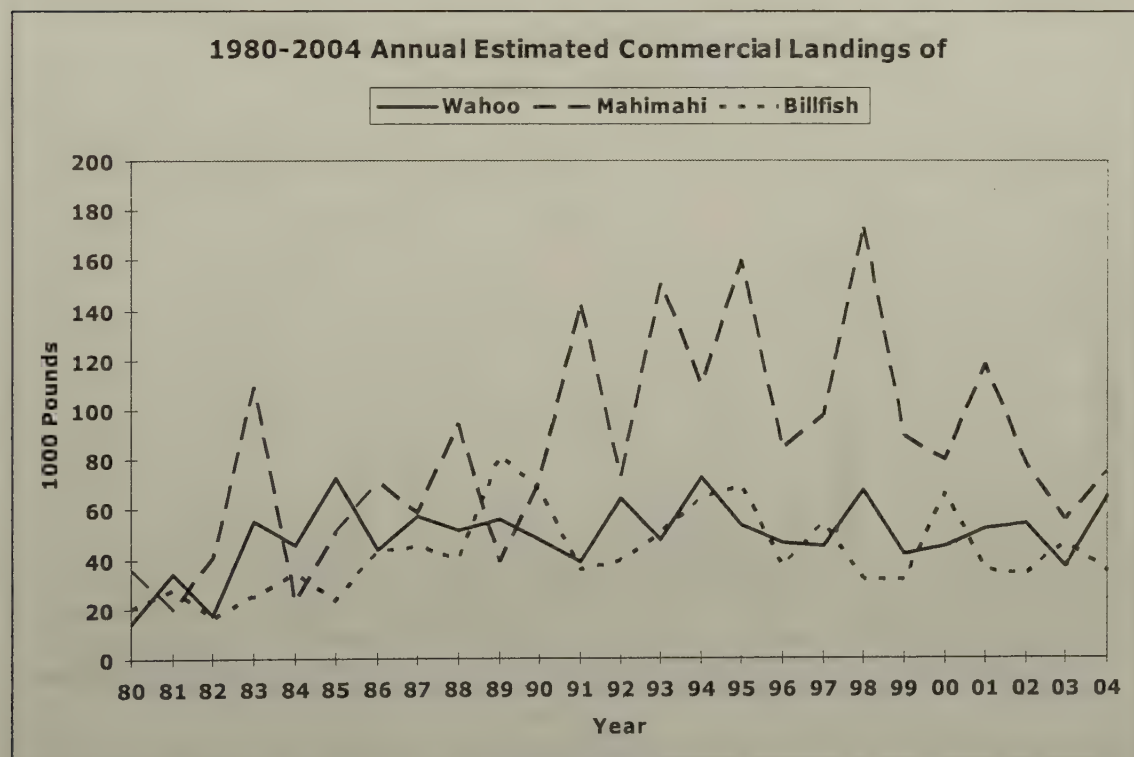


Figure C-3-4

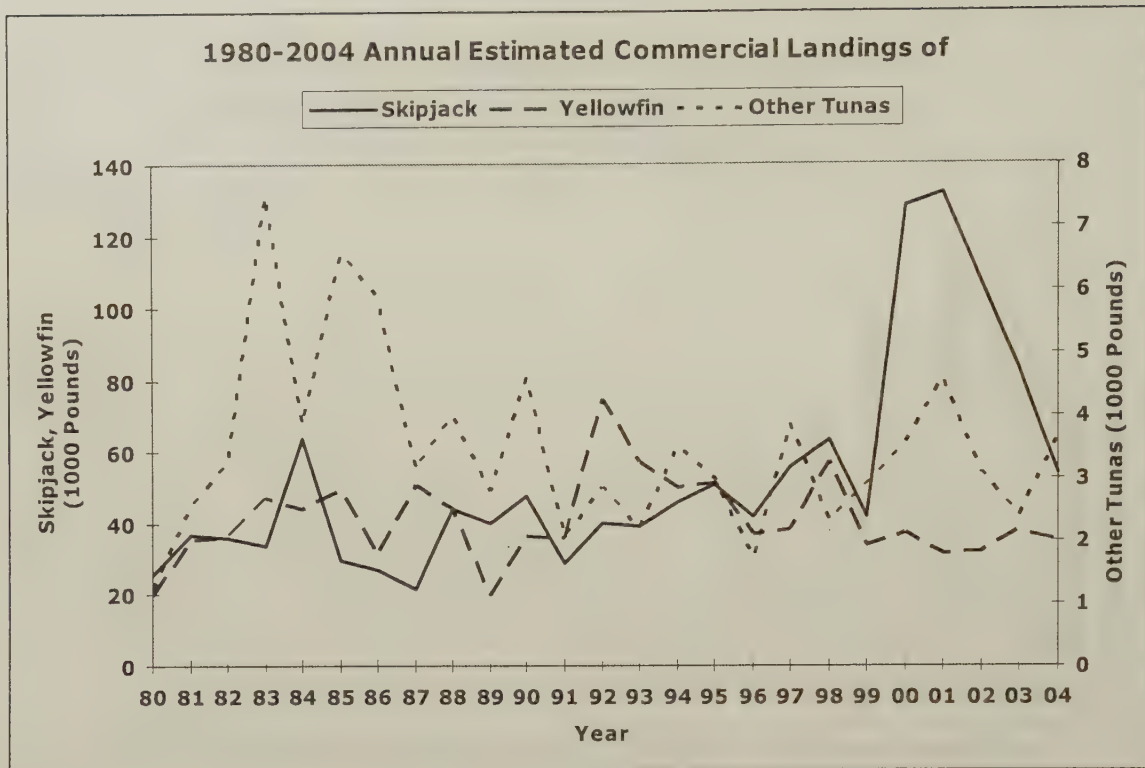


Figure C-3-5

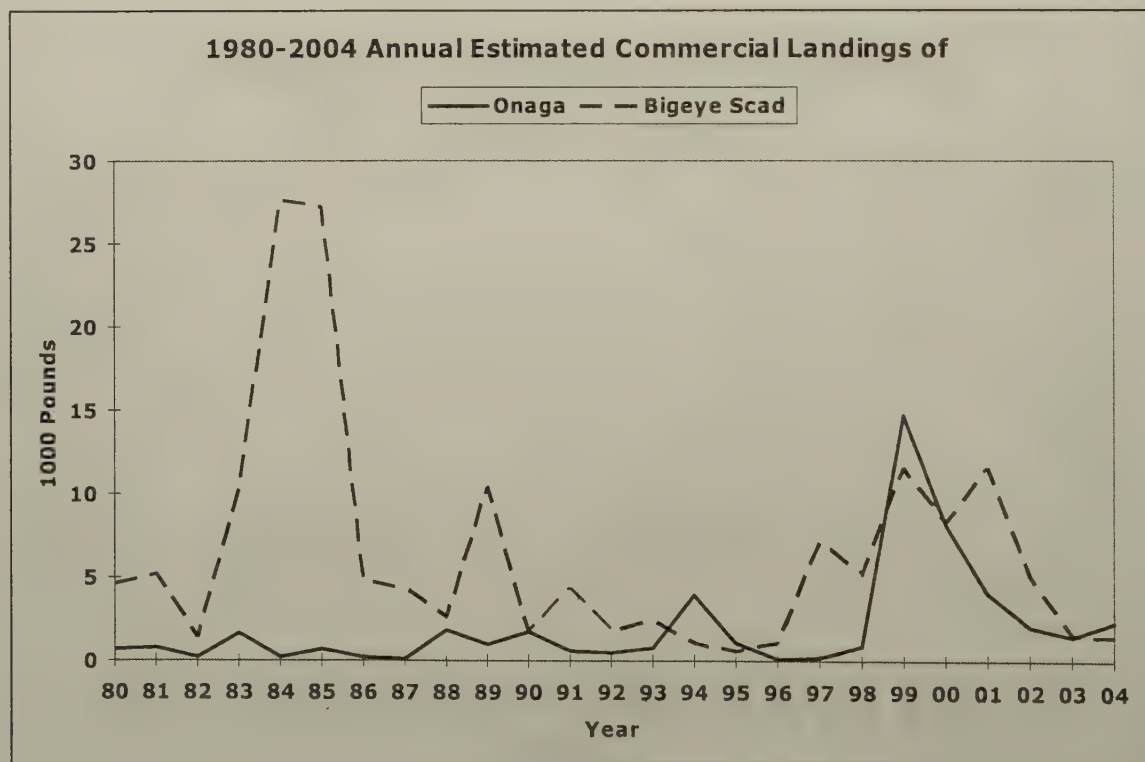


Figure C-3-6

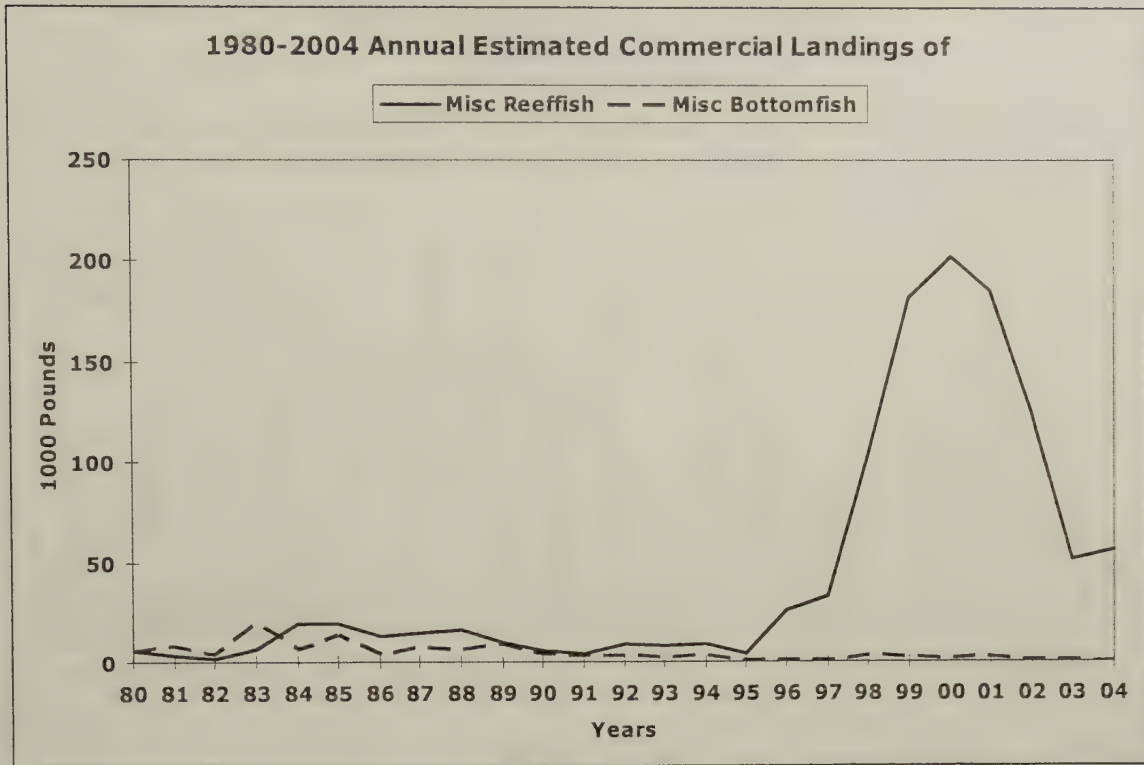


Figure C-3-7

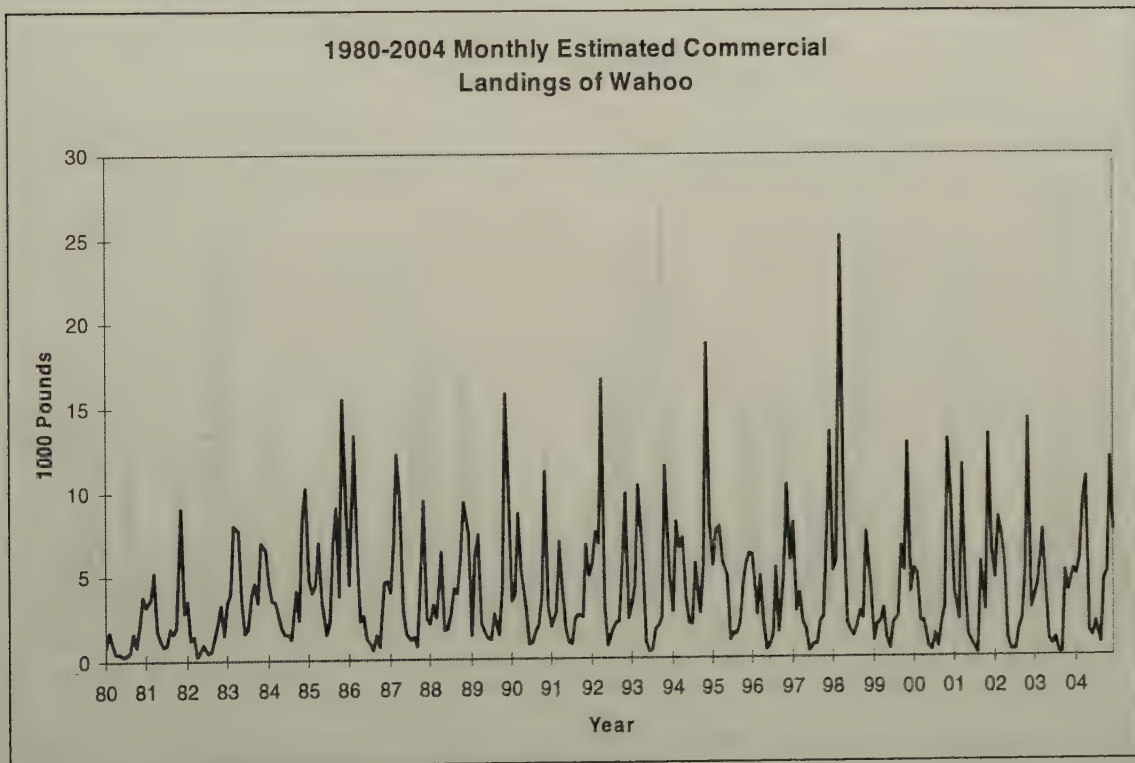


Figure C-4-1

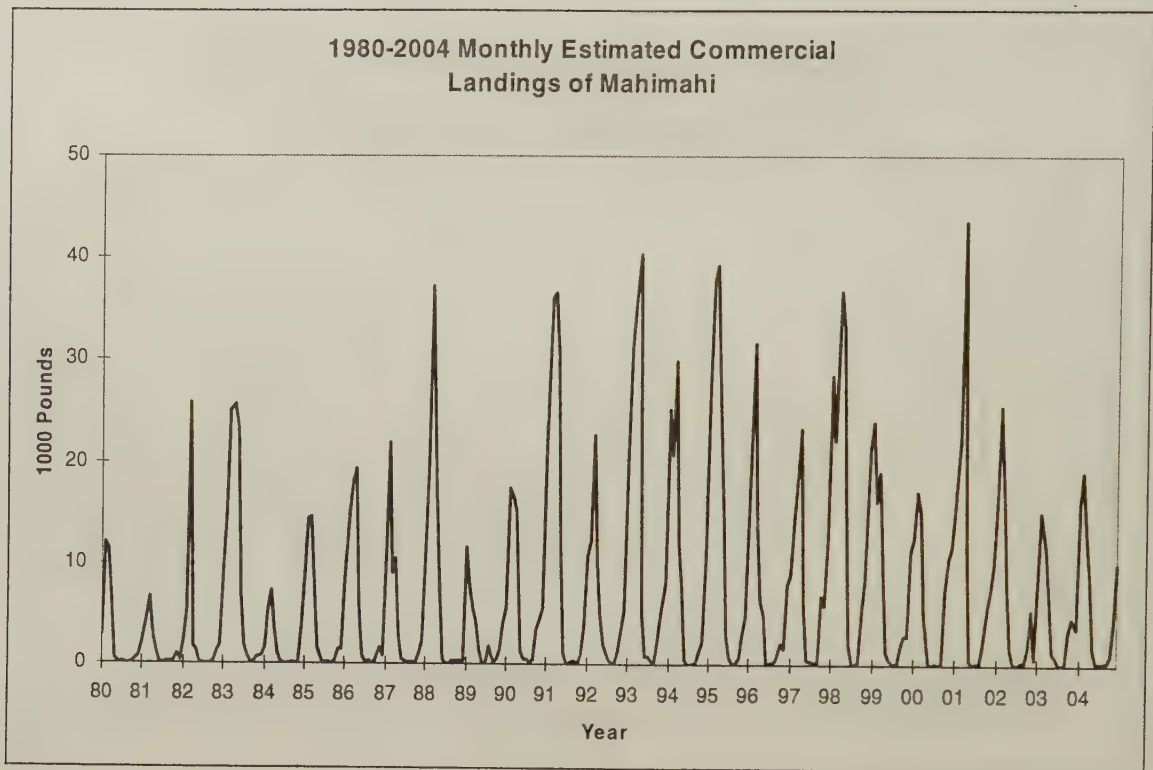


Figure C-4-2

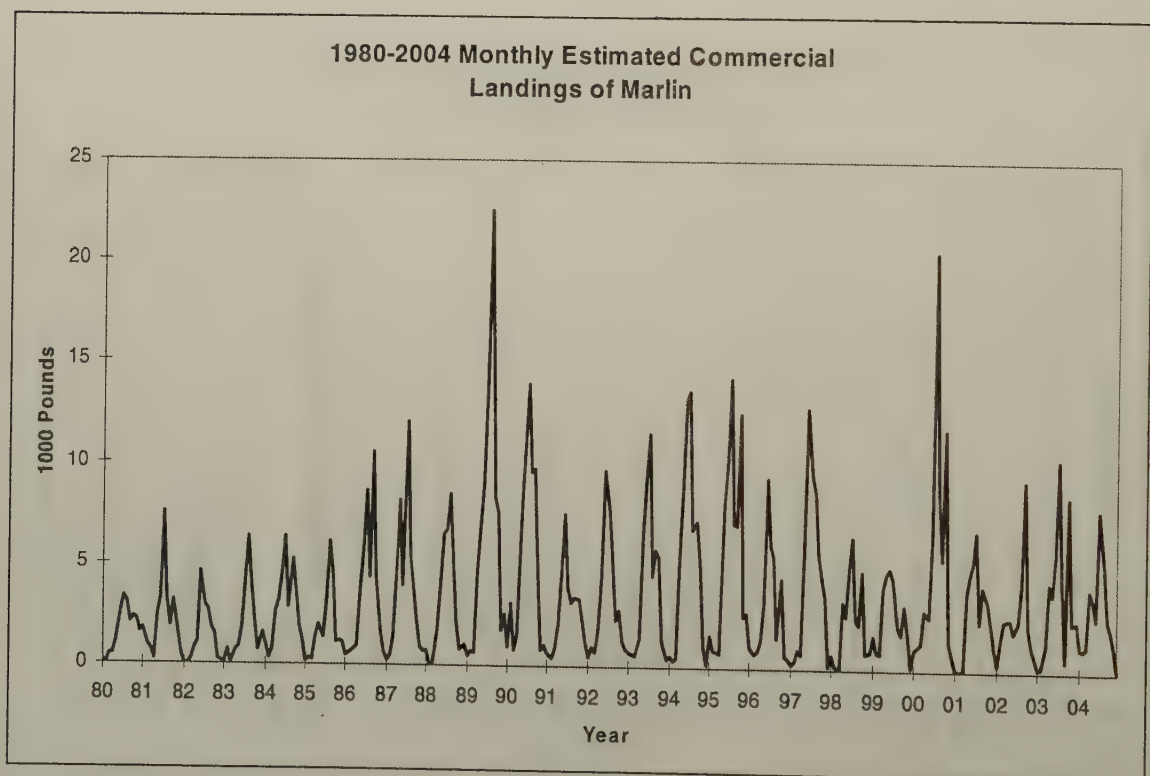


Figure C-4-3

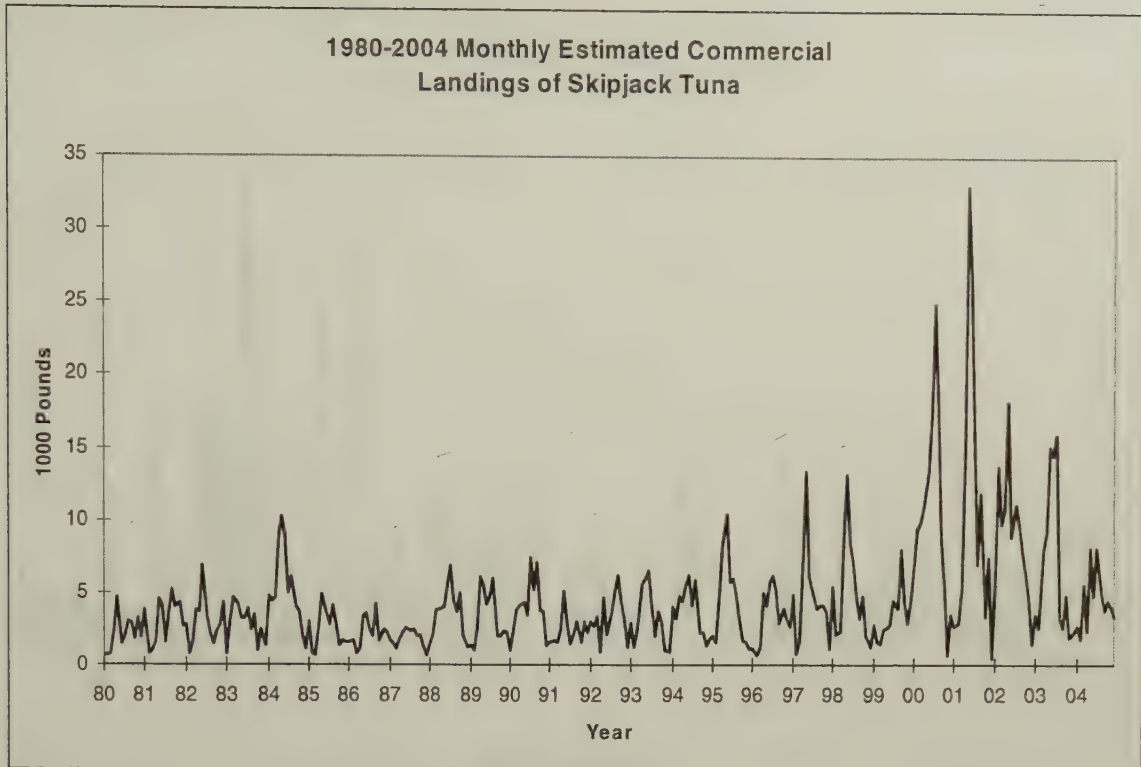


Figure C-4-4

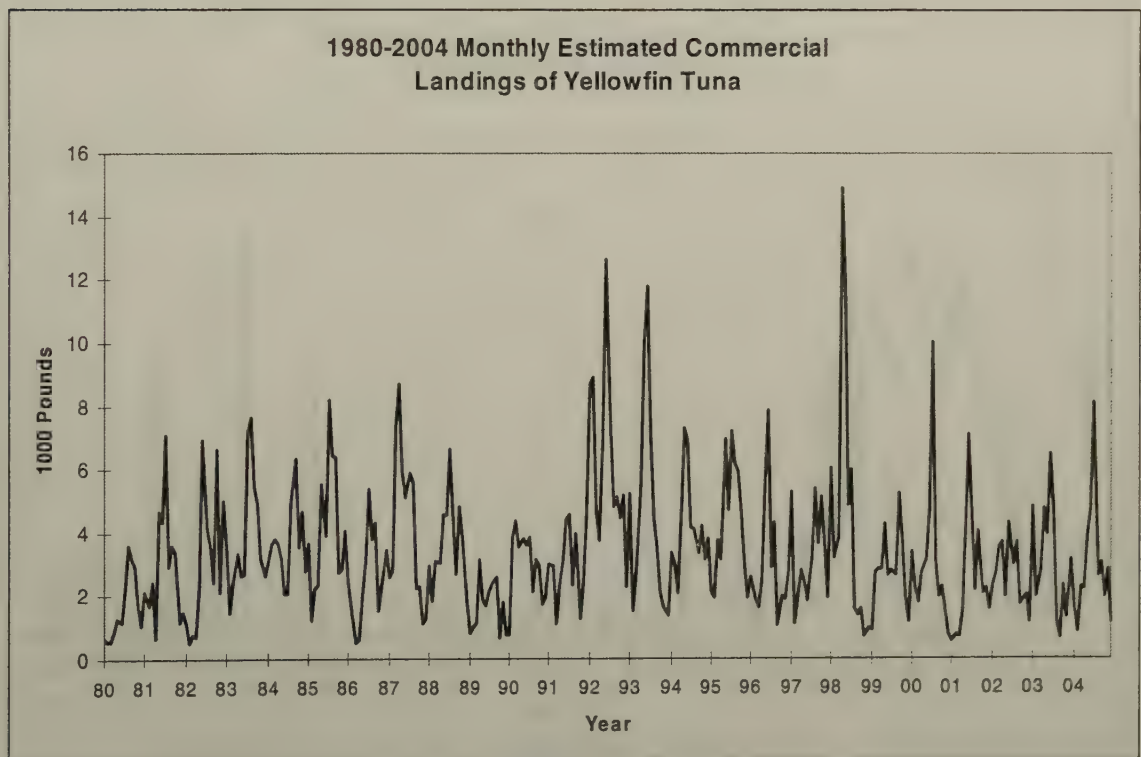


Figure C-4-5

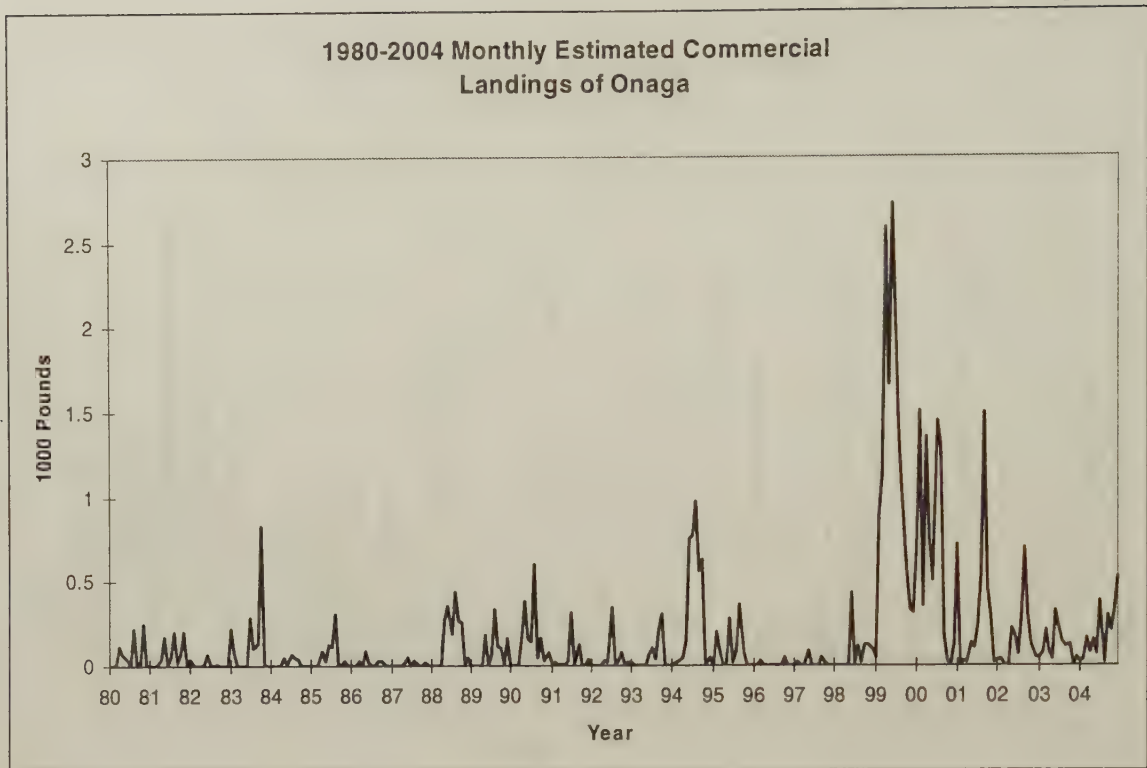


Figure C-4-6

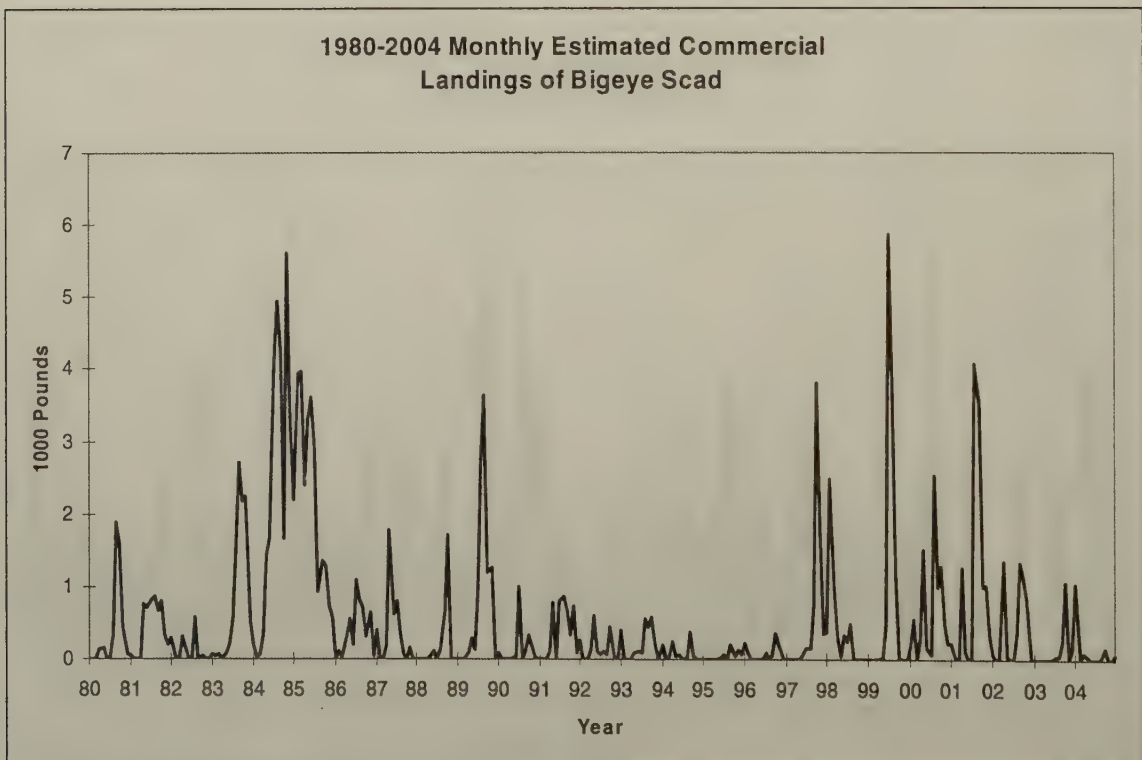


Figure C-4-7

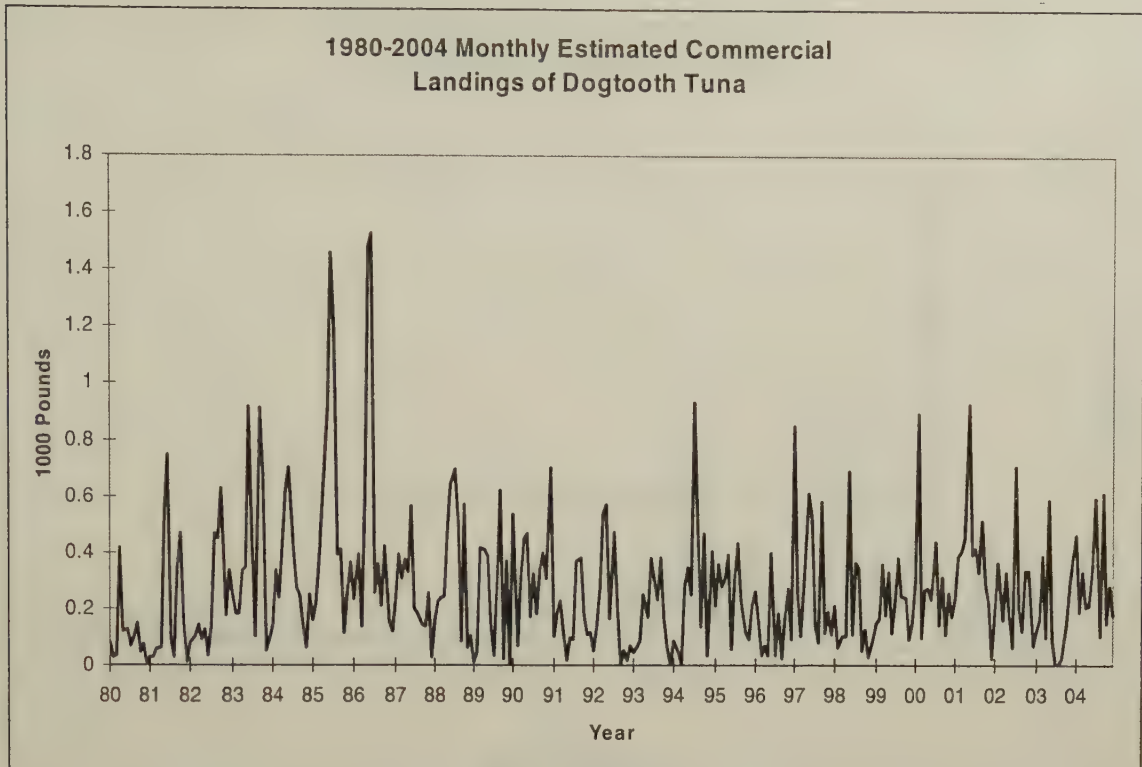


Figure C-4-8

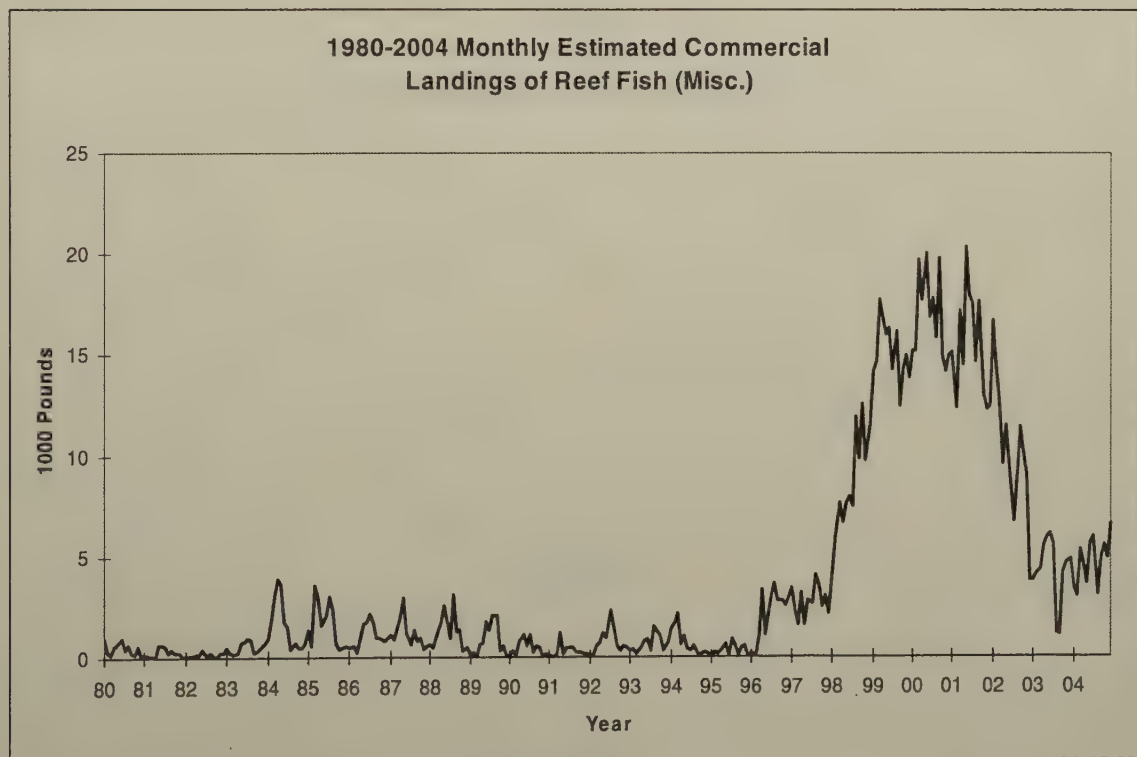


Figure C-4-9

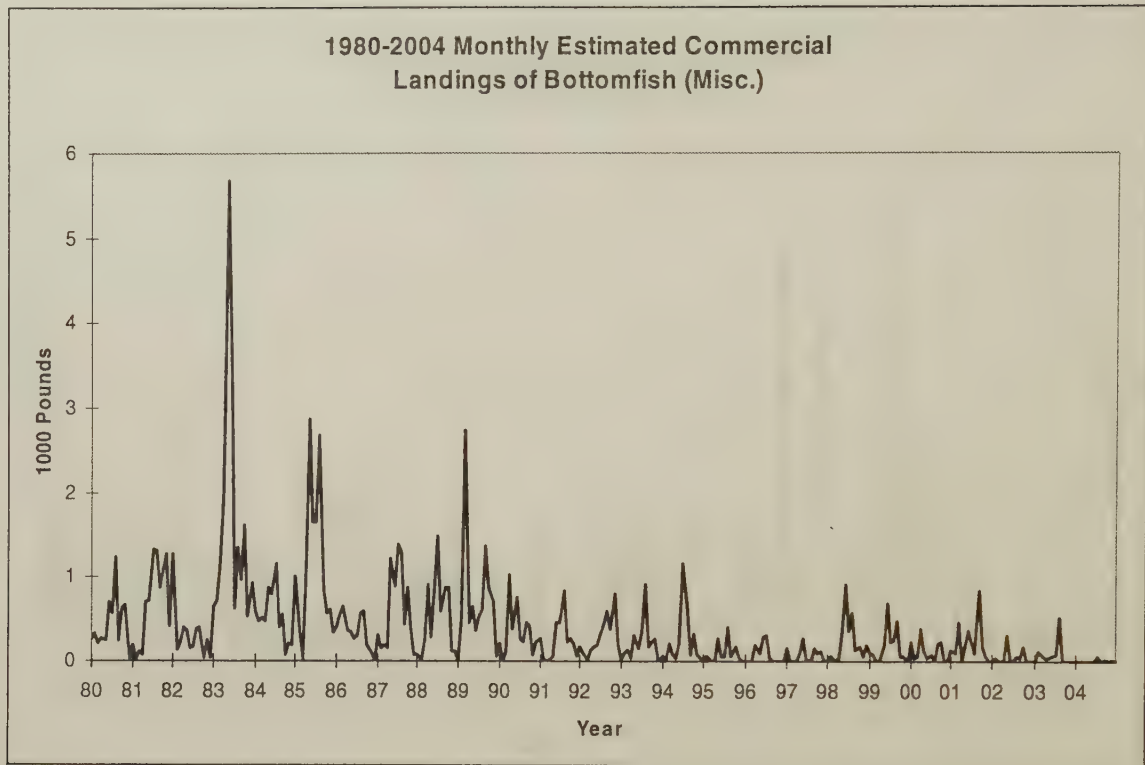


Figure C-4-10

STATE OF HAWAII 2004 FISHERY STATISTICS

Compiled by
Division of Aquatic Resources
and the
Western Pacific Fishery Information Network

June 2006

CONTENTS

	Page
Introduction	D.1
Data Collecting System	D.2
Data Processing System	D.3
Data Reporting System	D.3
Tables	D.8
Figures	D.34

LIST OF HAWAII SUMMARY TABLES

Table	Title	Page
D-1	2004 Reported Commercial Landings	D.8
D-2	January 2004 Reported Commercial Landings	D.10
D-3	February 2004 Reported Commercial Landings	D.12
D-4	March 2004 Reported Commercial Landings	D.14
D-5	April 2004 Reported Commercial Landings	D.16
D-6	May 2004 Reported Commercial Landings	D.18
D-7	June 2004 Reported Commercial Landings	D.20
D-8	July 2004 Reported Commercial Landings	D.22
D-9	August 2004 Reported Commercial Landings	D.24
D-10	September 2004 Reported Commercial Landings	D.26
D-11	October 2004 Reported Commercial Landings	D.28
D-12	November 2004 Reported Commercial Landings	D.30
D-13	December 2004 Reported Commercial Landings	D.32

LIST OF HAWAII FIGURES

Figure	Title	Page
D-1-1	2004 Fisheries Categories: Reported Commercial Landings of Pelagic, Bottom, Reef, and Other	D.34
D-1-2	2004 Monthly Reported Commercial Landings of Tunas, PMUS, and BMUS	D.34
D-1-3	2004 Monthly Reported Commercial Landings of Wahoo, Mahimahi, and Billfish	D.35
D-1-4	2004 Monthly Reported Commercial Landings of Skipjack, Bigeye Tuna, and Swordfish	D.35
D-1-5	2004 Monthly Reported Commercial Landings of Albacore, Yellowfin, and Other Tunas	D.36
D-2-1	1948-2004 Average Monthly Reported Commercial Landings of Tunas, PMUS, and BMUS	D.36
D-2-2	1948-2004 Average Monthly Reported Commercial Landings of Wahoo and Mahimahi	D.37
D-2-3	1948-2004 Average Monthly Reported Commercial Landings of Striped and Blue Marlin	D.37
D-2-4	1948-2004 Average Monthly Reported Commercial Landings of Skipjack Tuna, Bigeye Tuna, and Swordfish	D.38
D-2-5	1948-2004 Average Monthly Reported Commercial Landings of Opakapaka, Onaga, and Uku	D.38
D-2-6	1948-2004 Average Monthly Reported Commercial Landings of Albacore, Yellowfin and Other Tuna	D.39
D-2-7	1948-2004 Average Monthly Reported Commercial Landings of Bigeye and Mackerel Scad	D.39
D-2-8	1948-2004 Average Monthly Reported Commercial Landings of Spiny Lobster and Saltwater Shrimp	D.40
D-3-1	1979-2004 Annual Reported Commercial Landings of Pelagic, Bottom, Reef, and Other Fish	D.40
D-3-2	1948-2004 Annual Reported Commercial Landings (Pounds and Dollars)	D.41
D-3-3	1948-2004 Annual Reported Commercial Landings of Tunas, PMUS, and BMUS	D.41
D-3-4	1948-2004 Annual Reported Commercial Landings of Wahoo and Mahimahi	D.42
D-3-5	1948-2004 Annual Reported Commercial Landings of Albacore, Yellowfin, and Other Tunas	D.42
D-3-6	1948-2004 Annual Reported Commercial Landings of Skipjack, Bigeye Tuna, and Swordfish	D.43

LIST OF HAWAII FIGURES (cont.)

Figure	Title	Page
D-3-7	1948-2004 Annual Reported Commercial Landings of Striped and Blue Marlin	D.43
D-3-8	1948-2004 Annual Reported Commercial Landings of Opakapaka, Onaga, and Uku	D.44
D-3-9	1948-2004 Annual Reported Commercial Landings of Bigeye and Mackerel Scad	D.44
D-3-10	1948-2004 Annual Reported Commercial Landings of Spiny Lobster and Saltwater Shrimp	D.45
D-4-1	1986-2004 Monthly Reported Commercial Landings of Yellowfin Tuna	D.45
D-4-2	1986-2004 Monthly Reported Commercial Landings of Skipjack Tuna	D.46
D-4-3	1986-2004 Monthly Reported Commercial Landings of Bigeye Tuna	D.46
D-4-4	1986-2004 Monthly Reported Commercial Landings of Opakapaka	D.47
D-4-5	1986-2004 Monthly Reported Commercial Landings of Bigeye Scad	D.47
D-4-6	1986-2004 Monthly Reported Commercial Landings of Mahimahi	D.48
D-4-7	1986-2004 Monthly Reported Commercial Landings of Striped Marlin	D.48
D-4-8	1986-2004 Monthly Reported Commercial Landings of Wahoo	D.49
D-4-9	1986-2004 Monthly Reported Commercial Landings of Onaga	D.49
D-4-10	1986-2004 Monthly Reported Commercial Landings of Blue Marlin	D.50
D-4-11	1986-2004 Monthly Reported Commercial Landings of Swordfish	D.50
D-4-12	1986-2004 Monthly Reported Commercial Landings of Albacore Tuna	D.51
D-4-13	1986-2004 Monthly Reported Commercial Landings of Spiny Lobster	D.51
D-4-14	1986-2004 Monthly Reported Commercial Landings of Saltwater Shrimp	D.52

STATE OF HAWAII 2004 FISHERY STATISTICS

INTRODUCTION

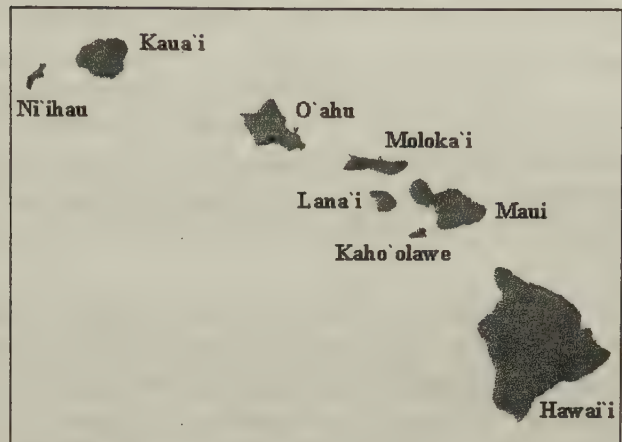
The Hawaiian Archipelago stretches northwestward over 1,500 miles.

Location: 19° N latitude, 155° W longitude to about 28° N latitude and 178° W longitude

Islands: Hawaii, Maui, Lanai, Molokai, Oahu, Kauai, and Niihau (comprise over 99% of the total land area)

Population: 1,263,000 (*The State of Hawaii Data Book, 2005 Update*)

Commercial Catch Breakdown (lbs):
Over 85% on Oahu, about 9% on Hawaii (Big Island), 3% on Maui, 2% on Kauai, and less than 1% on other islands



Hawaiian Islands; copied and modified from:
http://satftp.soest.hawaii.edu/space/hawaii/maps/All_Islands_map.710x509.gif; SOEST
Satlab Server

The fisheries of the State of Hawaii are quite diverse; they vary from shore-based algae harvesting by hand to large-vessel fisheries such as longlining and lobster fishing. There are several major fisheries: tuna fishing through various methods, lobster trapping, hook-and-line bottom fishing for the grouper-snapper-jack complex, net fishing for species such as the bigeye scad, and trolling for such pelagic species as marlin, wahoo, and mahimahi.

In 2001, prohibitions were placed on landing shark fins without their associated carcasses and on making shallow-sets with longline gear to target swordfish. Shark and swordfish catches dropped dramatically, and longline effort significantly shifted from swordfish to tunas.

In 2004, the swordfish fishery was reopened due to new technology that reduced sea turtle bycatch. With the reopening, new regulations were implemented that required fishing vessels to have a shallow-set certificate for each deployment of shallow-set longline fishing gear. A limited number of certificates were made available for purchase each year. In addition, the swordfish fishery would close for the remainder of the year if the number of allowable interactions with leatherback (16) or loggerhead (17) sea turtles was reached.

Commercial fishing (i.e., selling catches or providing charter fishing services) in Hawaii requires purchasing a commercial marine fishing license. In 2004, there were 3,843

licensed commercial fishermen. The summary 2004 data provided in this document are current as of March 2006 and were created from a combination of Hawaii Division of Aquatic Resources' (HDAR) fishermen and dealer reporting forms processed through their Dealer Reporting System (DRS) and Fisherman Reporting System (FRS) as well as fishery reporting forms (including federal longline logbooks). It is believed to represent over 95% of what may eventually be submitted and processed.

DATA COLLECTING SYSTEM

In the past, data processed in the Reported Landings tables and charts presented in this section were collected from various Fishermen's Reporting System (FRS) Forms. Beginning in October 2002, HDAR implemented several new FRS forms that no longer required sales information reporting as a trade-off for requiring improved catch, effort, and bycatch statistics. The FRS was modified to accommodate these new forms.

The Dealer Reporting System (DRS) was computerized in 2000 and is now a major source of sales data used to create the tables and charts. Data from the NOAA Fisheries Longline Logbook Program are integrated with DRS and FRS data to create the "best available" summaries presented in this report.

Dealers are required by State law to submit a Commercial Marine Dealer's Report for each month that they are in the business of purchasing marine life. Information collected includes

- | | |
|---|------------------|
| • Dealer Name | • Species Bought |
| • Dealer Number | • Pounds Bought |
| • Month and Year | • Pieces Bought |
| • Date | • Amount Paid |
| • First and Last Name from Whom Fish was Bought | • Condition |
| • Fisherman's Commercial Marine License Number | |

Likewise, all holders of a Commercial Marine License (CML) are required by state law to report on their fishing activity. The majority of commercial fishermen use the "Monthly Fishing Report," a replacement for the old General Fish Catch Report (C-3 Form). This form collects data on fishing catch and effort for each day, method, and area fished, and it is processed in the FRS. Information collected includes

- | | |
|--|-------------------|
| • Fisherman's Name and Commercial License Number | • Port of Landing |
| • Boat's Name and its Registration/USCG Number | • Species Name |
| • Month and Year Fished | • Number Landed |
| • Day Fished | • Pounds Landed |
| • Charter Trip (y/n) | • Number Lost |
| • Buoy or Area Fished | • Number Released |
| • Fishing Method | |

D.3

- Hours Fished per Method/Area
- Number of Net Sets
- Number of Fishing Lines, Traps, or Net Length

Other FRS data collection forms include the Net, Trap and Dive Activity Report, Tuna Handline Trip Report, Deep Sea Handline Trip Report, Aku Boat Report, NWHI Bottomfish Trip Sales Report, and NWHI Bottomfish Trip Daily Log. Commercial collectors of tropical marine fish are required to have an aquarium permit in addition to their commercial marine license, and they are required to report monthly on the C-6 Aquarium Fish Catch Report. Aquarium fish catches, however, are not included in this report's statistics.

The assumption is made that the data submitted by fishermen are complete and accurate. The HDAR continually attempts to improve the quality of data and decrease the time delays in receiving and processing the data.

No real measurement is available for what percent of the total commercial catch is actually reported to HDAR via fishermen and dealers, but estimates have ranged from about 10% to over 99%, depending on the species and fishery. The overall percent coverage was probably over 80% in 2004.

DATA PROCESSING SYSTEM

When HDAR receives various data reporting forms, staff code and edit the data before keypunching. Forms that fail initial editing are returned for correction and resubmission, or minor problems may be cleared up over the telephone. Delinquency notices are sent to those who fall more than a few months behind in their reporting. Once the data are keypunched, HDAR staff use computer-generated reports to verify and correct errors in the database. When the database is considered to be reasonably complete and error free, it is ready for use in producing various summary catch reports.

DATA REPORTING SYSTEM

More than 150 marine species and species groups are recorded in HDAR's monthly landings reports, many of which are insignificant in the total catch. To help reduce this document's size and improve the usability of the tables, WPacFIN staff combined some of the less important species, reorganized the order of presentation, created a new species coding system, and translated all records in the database. The new coding system has 100 species and species groups based on flexible ecological and phylogenetic criteria. All of the commercially important pelagic and bottomfish species or unique species groups have individual codes and are reported separately. Marine pond catches are included in the species totals, but make up less than 0.4% of the total landings for each year.

The monthly and annual reports included in this document contain the common name, pounds caught, pounds sold, value rounded to the nearest dollar, and the average price per pound for each species. Each monthly report contains a subtotal for the sum of all species for that month. Several types of graphs are also included. Please note that some of the charts in this volume are new or modified from earlier volumes. More up-to-date tables and charts are available at the WPacFIN Website at <<http://www.pifsc.noaa.gov/wpacfin>>.

The following species, species groups, and abbreviations are used in the tables and graphs of Hawaii's fishery statistics:

Note: Many of the species included in this report have been recategorized over the years. For example, the Magnuson Fishery Conservation and Management Act of 1976 was amended in 1992 to include tunas in the Pelagic Management Unit Species (PMUS) category. However, this FSWP volume will maintain the original species categorizations from previous volumes for comparative purposes. As such, tunas are kept in a separate category.

I. Pelagic Management Unit Species (PMUS)

Mahimahi (dolphin)	Wahoo
Blue marlin	Black marlin
Striped marlin	Shortnose spearfish
Sailfish	Broadbill swordfish
Sharks	Billfish (misc)

II. Bottomfish Management Unit Species (BMUS)

Deep water jacks (misc)	Amberjack
Pig-lipped ulua (jack)	White ulua
Hawaiian grouper	Blue-lined snapper
Ehu (red snapper)	Gindai (flower snapper)
Kalekale (pink snapper)	Lehi (silverjaw snapper)
Onaga (long-tailed snapper)	Opakapaka (pink snapper)
Uku (gray snapper)	Snappers

III. Billfish

Billfish	Blue marlin
Black marlin	Striped marlin
Shortnose spearfish	Sailfish
Broadbill swordfish	

IV. Tunas

Other tunas	Skipjack tuna
Yellowfin tuna	Albacore
Bigeye tuna	

V. Other Tunas

Miscellaneous tunas	Bluefin tuna
Frigate tuna	Kawakawa

VI. Fisheries Categories

A. Pelagic Species

All PMUS and tuna species including the following:

Rainbow runner	Barracuda
Japanese mackerel	Frigate tuna
Ocean sunfish	Ocean moonfish

B. Bottomfish

All BMUS plus the following:

Blue crevally	Dobe ulua
Paapaa ulua	Blue spot grouper
Porgy	

C. Reef Fish

Reef jacks (misc)	Squirrelfish
Trumpetfish	Scorpionfish
Mountain bass	Bigeyes
Cardinalfish	Goatfish
Rudderfish	Butterflyfish
Damselfish	Hawkfish
Tipapia	Wrasse
Parrotfish	Gobies
Surgeonfish-tangs	Flounders
Triggerfish	Filefish
Pufferfish	

D. Other

Miscellaneous

Eels

Mackerel scad (opelu)

Anchovy

Bonefish

Milkfish

Needlefish

Threadfin

Pomfret

Freshwater fish

Slipper lobster

Shrimp (freshwater)

Octopus

Limpets (saltwater)

Clams

Precious corals

Sea cucumbers

Algae

Rays

Bigeye scad (akule)

Leatherback

Ten pounder

Herring-sardine

Flyingfish

Halfbeaks

Mullet

Snake mackerel

Spiny lobster

Crabs

Shrimp (saltwater)

Squid

Limpets (freshwater)

Stoney corals

Sea urchins

Sea turtles

This page is intentionally left blank.

Table D-1
2004 Annual Reported Commercial Landings

Species	Caught	Sold	Value	Price/Lb.
Miscellaneous	4,220	3,224	\$6,200	\$ 1.92
Sharks	533,693	234,225	\$74,471	\$ 0.32
Rays	18	0	\$0	\$ 0.00
Eels	764	758	\$795	\$ 1.05
Armorhead	4	0	\$0	\$ 0.00
Bigeye scad (akule)	742,443	300,299	\$581,247	\$ 1.94
Mackerel scad	259,164	171,931	\$351,523	\$ 2.04
Leatherback	512	490	\$744	\$ 1.52
Ten pounder	472	237	\$238	\$ 1.01
Bonefish	3,502	2,807	\$3,128	\$ 1.11
Herring/sardine	5	0	\$0	\$ 0.00
Milkfish	1,311	1,212	\$1,438	\$ 1.19
Flying fish	18	8	\$10	\$ 1.22
Needlefish	482	204	\$364	\$ 1.79
Threadfin	278	223	\$981	\$ 4.40
Mullet	10,769	10,719	\$35,651	\$ 3.33
Pomfret	774,928	765,712	\$1,316,367	\$ 1.72
Oilfish	348,485	345,557	\$568,642	\$ 1.65
Jacks (misc)	2,316	483	\$1,451	\$ 3.00
Amberjack	10,815	462	\$541	\$ 1.17
Sasa ulua	712	497	\$1,112	\$ 2.24
Pig-lipped ulua	29,147	24,917	\$56,592	\$ 2.27
Dobe ulua	10,686	3,314	\$5,573	\$ 1.68
Papa ulua	7,388	2,675	\$6,862	\$ 2.57
White ulua	18,319	13,015	\$20,690	\$ 1.59
Black ulua	3,538	3,083	\$5,133	\$ 1.67
Blue crevally	7,895	5,149	\$10,085	\$ 1.96
Hawaiian grouper	48,258	42,388	\$184,917	\$ 4.36
Blue spot grouper	713	353	\$877	\$ 2.49
Snappers	3,397	1,915	\$5,969	\$ 3.12
Yellowtail kali	71	18	\$35	\$ 1.92
Blue-lined snapper	47,432	24,486	\$27,095	\$ 1.11
Ehu (red snapper)	37,663	34,752	\$144,709	\$ 4.16
Gindai (flower snapper)	6,276	5,627	\$19,291	\$ 3.43
Golden kalekale	10,922	9,846	\$32,532	\$ 3.30
Lehi (silverjaw)	7,682	7,357	\$26,270	\$ 3.57
Onaga (red snapper)	168,955	147,338	\$834,287	\$ 5.66
Opakapaka (pink snapper)	148,735	138,568	\$727,329	\$ 5.25
Uku (gray snapper)	169,241	145,910	\$414,097	\$ 2.84
Snake mackerel	7	4	\$2	\$ 0.50
Porgy	2,000	1,196	\$2,607	\$ 2.18
Other reeffish	113	2	\$3	\$ 1.25
Reef jacks	56	55	\$167	\$ 3.03
Squirrelfish	40,719	39,976	\$120,173	\$ 3.01

Table D-1
2004 Annual Reported Commercial Landings (Cont.)

Species	Caught	Sold	Value	Price/Lb.
Trumpetfish	80	48	\$73	\$ 1.54
Scorpionfish	3,039	2,680	\$10,441	\$ 3.90
Mountain bass	2,210	1,819	\$7,002	\$ 3.85
Bigeyes	15,635	11,927	\$27,420	\$ 2.30
Goatfish	67,873	49,189	\$119,459	\$ 2.43
Rudderfish	23,353	21,648	\$23,303	\$ 1.08
Damselfish	1,900	1,702	\$4,407	\$ 2.59
Hawkfish	472	472	\$1,097	\$ 2.33
Tilapia	907	907	\$1,476	\$ 1.63
Wrasse	6,161	4,713	\$20,658	\$ 4.38
Parrotfish	34,045	31,111	\$83,782	\$ 2.69
Surgeon/tangs	89,159	73,788	\$112,332	\$ 1.52
Flounders	27	24	\$25	\$ 1.04
Filefish	4,077	1,322	\$1,543	\$ 1.17
Other pelagic	801,674	786,102	\$1,343,070	\$ 1.71
Rainbow runner	4,426	4,111	\$7,739	\$ 1.88
Mahimahi (dolphin)	2,279,738	2,213,156	\$4,892,455	\$ 2.21
Barracudas	41,663	35,345	\$30,976	\$ 0.88
Wahoo	901,686	846,104	\$2,185,722	\$ 2.58
Japanese mackerel	1	0	\$0	\$ 0.00
Misc tunas	55,554	292	\$2,362	\$ 8.09
Skipjack tuna	1,099,249	873,592	\$1,146,020	\$ 1.31
Yellowfin tuna	3,128,315	3,072,102	\$7,025,186	\$ 2.29
Albacore	1,131,105	1,125,962	\$1,489,194	\$ 1.32
Bigeye tuna	10,249,806	9,823,605	\$28,721,664	\$ 2.92
Kawakawa	7,667	3,318	\$4,775	\$ 1.44
Other billfish	14,635	886	\$1,209	\$ 1.36
Broadbill swordfish	534,256	520,373	\$1,224,845	\$ 2.35
Blue marlin	1,003,880	890,240	\$1,106,404	\$ 1.24
Black marlin	9,582	7,089	\$11,039	\$ 1.56
Striped marlin	953,699	932,731	\$1,346,726	\$ 1.44
Shortnose spearfish	447,191	442,451	\$430,509	\$ 0.97
Sailfish	17,038	7,581	\$9,758	\$ 1.29
Spiny lobster	8,402	6,371	\$72,043	\$11.31
Slipper lobster	41	7	\$56	\$ 8.00
Crabs	24,769	13,234	\$52,497	\$ 3.97
Shrimp (saltwater)	1,172	30	\$270	\$ 9.00
Octopus	22,716	20,239	\$60,736	\$ 3.00
Squid	801	535	\$1,165	\$ 2.18
Limpets (saltwater)	8,807	4,572	\$33,697	\$ 7.37
Invertebrates	15,149	8,925	\$261,550	\$29.31
Algae	16,710	6,206	\$27,100	\$ 4.37
TOTAL	26,492,789	24,337,499	\$57,491,981	\$ 2.36

Table D-2
January 2004 Reported Commercial Landings

Species	Caught	Sold	Value	Price/Lb.
Miscellaneous	243	243	\$234	\$ 0.96
Sharks	44,401	27,909	\$6,947	\$ 0.25
Eels	10	10	\$10	\$ 1.00
Bigeye scad (akule)	55,203	19,251	\$36,203	\$ 1.88
Mackerel scad	20,535	11,537	\$22,510	\$ 1.95
Leatherback	40	40	\$91	\$ 2.31
Bonefish	238	238	\$359	\$ 1.51
Milkfish	50	50	\$63	\$ 1.25
Needlefish	15	15	\$29	\$ 2.00
Threadfin	10	10	\$25	\$ 2.68
Mullet	79	79	\$359	\$ 4.57
Pomfret	37,586	37,586	\$79,701	\$ 2.12
Oilfish	30,860	30,860	\$40,169	\$ 1.30
Jacks (misc)	83	73	\$200	\$ 2.74
Amberjack	1,686	144	\$72	\$ 0.50
Sasa ulua	79	73	\$85	\$ 1.17
Pig-lipped ulua	1,920	1,740	\$4,098	\$ 2.36
Dobe ulua	984	982	\$1,561	\$ 1.59
Papa ulua	157	25	\$57	\$ 2.31
White ulua	1,103	728	\$935	\$ 1.28
Black ulua	18	18	\$28	\$ 1.61
Blue crevally	222	184	\$365	\$ 1.98
Hawaiian grouper	3,684	2,317	\$11,404	\$ 4.92
Blue spot grouper	56	17	\$43	\$ 2.50
Snappers	213	213	\$557	\$ 2.62
Yellowtail kali	5	0	\$0	\$ 0.00
Blue-lined snapper	5,049	1,918	\$2,453	\$ 1.28
Ehu (red snapper)	3,821	2,652	\$11,814	\$ 4.45
Gindai (flower snapper)	407	305	\$1,023	\$ 3.36
Golden kalekale	1,039	1,039	\$3,467	\$ 3.34
Lehi (silverjaw)	1,381	1,381	\$5,601	\$ 4.06
Onaga (red snapper)	12,345	9,980	\$67,384	\$ 6.75
Opakapaka (pink snapper)	17,485	16,378	\$91,264	\$ 5.57
Uku (gray snapper)	7,465	6,199	\$24,884	\$ 4.01
Snake mackerel	2	0	\$0	\$ 0.00
Porgy	69	69	\$102	\$ 1.49
Other reef fish	3	0	\$0	\$ 0.00
Reef jacks	2	2	\$5	\$ 3.00
Squirrelfish	6,514	6,514	\$8,340	\$ 1.28
Trumpetfish	12	10	\$12	\$ 1.24
Scorpionfish	264	264	\$1,124	\$ 4.27
Mountain bass	278	278	\$988	\$ 3.55
Bigeyes	417	417	\$1,186	\$ 2.84
Goatfish	9,623	6,988	\$15,605	\$ 2.23

Table D-2
January 2004 Reported Commercial Landings (Cont.)

Species	Caught	Sold	Value	Price/Lb.
Rudderfish	3,336	3,336	\$3,247	\$ 0.97
Damselfish	133	133	\$302	\$ 2.26
Hawkfish	62	62	\$109	\$ 1.75
Wrasse	694	632	\$2,110	\$ 3.34
Parrotfish	1,996	1,949	\$5,121	\$ 2.63
Surgeon/tangs	5,799	5,799	\$9,051	\$ 1.56
Filefish	184	184	\$442	\$ 2.41
Other pelagic	45,772	44,120	\$108,389	\$ 2.46
Rainbow runner	343	343	\$944	\$ 2.76
Mahimahi (dolphin)	97,340	86,860	\$221,629	\$ 2.55
Barracudas	1,294	857	\$1,215	\$ 1.42
Wahoo	39,713	34,420	\$105,092	\$ 3.05
Misc tunas	1,682	0	\$0	\$ 0.00
Skipjack tuna	32,307	22,106	\$44,559	\$ 2.02
Yellowfin tuna	193,550	182,273	\$500,272	\$ 2.74
Albacore	21,734	21,734	\$52,472	\$ 2.41
Bigeye tuna	660,489	646,271	\$2,343,902	\$ 3.63
Kawakawa	400	159	\$263	\$ 1.66
Other billfish	229	0	\$0	\$ 0.00
Broadbill swordfish	10,143	9,755	\$30,266	\$ 3.10
Blue marlin	74,177	39,119	\$55,551	\$ 1.42
Black marlin	185	185	\$296	\$ 1.60
Striped marlin	170,677	170,677	\$164,699	\$ 0.97
Shortnose spearfish	54,701	50,790	\$31,088	\$ 0.61
Sailfish	1,004	91	\$137	\$ 1.50
Spiny lobster	612	612	\$5,848	\$ 9.55
Crabs	3,108	1,764	\$6,972	\$ 3.95
Shrimp (saltwater)	139	0	\$0	\$ 0.00
Octopus	994	820	\$2,485	\$ 3.03
Limpets (saltwater)	1,033	679	\$3,739	\$ 5.51
Algae	1,364	841	\$5,593	\$ 6.65
TOTAL	1,690,841	1,515,298	\$4,147,147	\$ 2.74

Table D-3
February 2004 Reported Commercial Landings

Species	Caught	Sold	Value	Price/Lb.
Miscellaneous	288	288	\$317	\$ 1.10
Sharks	37,614	15,393	\$4,682	\$ 0.30
Bigeye scad (akule)	71,986	17,991	\$34,615	\$ 1.92
Mackerel scad	22,772	15,434	\$31,663	\$ 2.05
Leatherback	10	10	\$11	\$ 1.20
Ten pounder	31	31	\$31	\$ 1.00
Bonefish	274	54	\$68	\$ 1.25
Herring/sardine	3	0	\$0	\$ 0.00
Milkfish	74	74	\$92	\$ 1.25
Needlefish	32	17	\$23	\$ 1.32
Threadfin	42	42	\$188	\$ 4.54
Mullet	113	113	\$512	\$ 4.53
Pomfret	46,442	46,442	\$92,072	\$ 1.98
Oilfish	37,915	37,915	\$56,944	\$ 1.50
Jacks (misc)	123	98	\$269	\$ 2.74
Amberjack	765	0	\$0	\$ 0.00
Sasa ulua	17	3	\$6	\$ 2.01
Pig-lipped ulua	3,634	2,421	\$4,017	\$ 1.66
Dobe ulua	91	91	\$167	\$ 1.84
Papa ulua	354	49	\$143	\$ 2.90
White ulua	1,024	159	\$445	\$ 2.80
Black ulua	132	90	\$157	\$ 1.75
Blue crevally	121	7	\$14	\$ 2.00
Hawaiian grouper	2,475	2,475	\$11,871	\$ 4.80
Blue spot grouper	119	14	\$35	\$ 2.50
Snappers	120	74	\$222	\$ 3.02
Yellowtail kali	13	0	\$0	\$ 0.00
Blue-lined snapper	1,754	783	\$1,126	\$ 1.44
Ehu (red snapper)	2,456	2,456	\$10,582	\$ 4.31
Gindai (flower snapper)	337	337	\$1,243	\$ 3.69
Golden kalekale	1,051	726	\$2,310	\$ 3.18
Lehi (silverjaw)	586	586	\$1,980	\$ 3.38
Onaga (red snapper)	12,727	8,767	\$54,216	\$ 6.18
Opakapaka (pink snapper)	12,804	12,804	\$66,983	\$ 5.23
Uku (gray snapper)	8,293	6,233	\$18,826	\$ 3.02
Porgy	90	59	\$53	\$ 0.89
Reef jacks	2	2	\$7	\$ 3.50
Squirrelfish	2,090	1,733	\$5,997	\$ 3.46
Trumpetfish	3	3	\$4	\$ 1.50
Scorpionfish	166	135	\$496	\$ 3.68
Mountain bass	104	104	\$325	\$ 3.14
Bigeyes	753	646	\$1,690	\$ 2.62
Goatfish	5,569	2,651	\$6,269	\$ 2.37
Rudderfish	2,530	2,530	\$2,946	\$ 1.16

Table D-3
February 2004 Reported Commercial Landings (Cont.)

Species	Caught	Sold	Value	Price/Lb.
Damselfish	38	38	\$84	\$ 2.23
Hawkfish	26	26	\$67	\$ 2.57
Wrasse	784	412	\$2,029	\$ 4.93
Parrotfish	2,121	1,512	\$4,362	\$ 2.88
Surgeon/tangs	4,895	4,264	\$7,238	\$ 1.70
Flounders	6	6	\$6	\$ 1.00
Filefish	324	5	\$5	\$ 1.00
Other pelagic	42,699	42,699	\$94,022	\$ 2.20
Rainbow runner	236	88	\$124	\$ 1.42
Mahimahi (dolphin)	197,172	176,950	\$391,687	\$ 2.21
Barracudas	1,089	589	\$899	\$ 1.53
Wahoo	27,779	21,479	\$81,467	\$ 3.79
Japanese mackerel	1	0	\$0	\$ 0.00
Misc tunas	2,047	5	\$9	\$ 1.75
Skipjack tuna	24,976	24,976	\$56,244	\$ 2.25
Yellowfin tuna	123,774	116,763	\$308,521	\$ 2.64
Albacore	74,665	72,377	\$133,765	\$ 1.85
Bigeye tuna	797,622	739,321	\$2,506,294	\$ 3.39
Kawakawa	407	102	\$156	\$ 1.54
Other billfish	342	120	\$180	\$ 1.50
Broadbill swordfish	10,508	10,508	\$27,620	\$ 2.63
Blue marlin	92,040	76,211	\$101,439	\$ 1.33
Black marlin	182	166	\$216	\$ 1.30
Striped marlin	82,555	82,555	\$154,627	\$ 1.87
Shortnose spearfish	47,791	47,791	\$47,204	\$ 0.99
Sailfish	484	197	\$373	\$ 1.89
Spiny lobster	1,179	1,102	\$13,541	\$12.29
Slipper lobster	15	0	\$0	\$ 0.00
Crabs	1,431	758	\$2,673	\$ 3.53
Shrimp (saltwater)	155	0	\$0	\$ 0.00
Octopus	1,331	1,331	\$3,893	\$ 2.92
Limpets (saltwater)	479	479	\$2,468	\$ 5.15
Invertebrates	575	0	\$0	\$ 0.00
Algae	1,053	455	\$1,916	\$ 4.21
TOTAL	1,818,674	1,603,118	\$4,356,743	\$ 2.72

Table D-4
March 2004 Reported Commercial Landings

Species	Caught	Sold	Value	Price/Lb.
Miscellaneous	859	859	\$1,278	\$ 1.49
Sharks	32,403	20,069	\$11,873	\$ 0.59
Eels	25	25	\$25	\$ 1.00
Bigeye scad (akule)	99,214	34,526	\$60,924	\$ 1.76
Mackerel scad	21,080	13,231	\$27,938	\$ 2.11
Leatherback	15	2	\$2	\$ 1.25
Bonefish	139	139	\$144	\$ 1.04
Milkfish	23	23	\$29	\$ 1.25
Flying fish	3	3	\$4	\$ 1.25
Needlefish	14	12	\$20	\$ 1.67
Threadfin	14	14	\$50	\$ 3.72
Mullet	74	74	\$341	\$ 4.60
Pomfret	76,449	76,449	\$124,066	\$ 1.62
Oilfish	47,492	47,492	\$76,029	\$ 1.60
Jacks (misc)	151	24	\$43	\$ 1.81
Amberjack	556	45	\$38	\$ 0.83
Sasa ulua	103	6	\$14	\$ 2.50
Pig-lipped ulua	1,964	1,964	\$4,858	\$ 2.47
Papa ulua	305	240	\$689	\$ 2.88
White ulua	900	702	\$948	\$ 1.35
Black ulua	124	124	\$248	\$ 2.00
Blue crevally	277	50	\$99	\$ 1.98
Hawaiian grouper	2,290	2,290	\$11,888	\$ 5.19
Blue spot grouper	23	23	\$61	\$ 2.65
Snappers	50	34	\$121	\$ 3.57
Blue-lined snapper	2,844	928	\$1,122	\$ 1.21
Ehu (red snapper)	1,915	1,915	\$9,398	\$ 4.91
Gindai (flower snapper)	237	237	\$967	\$ 4.08
Golden kalekale	816	816	\$3,363	\$ 4.12
Lehi (silverjaw)	460	460	\$1,489	\$ 3.24
Onaga (red snapper)	9,663	9,663	\$57,369	\$ 5.94
Opakapaka (pink snapper)	6,062	6,062	\$35,151	\$ 5.80
Uku (gray snapper)	8,183	8,183	\$27,258	\$ 3.33
Snake mackerel	1	0	\$0	\$ 0.00
Porgy	182	182	\$503	\$ 2.76
Squirrelfish	1,466	1,466	\$5,303	\$ 3.62
Trumpetfish	6	4	\$4	\$ 1.26
Scorpionfish	137	137	\$520	\$ 3.79
Mountain bass	56	56	\$240	\$ 4.25
Bigeyes	553	553	\$1,336	\$ 2.42
Goatfish	11,792	7,369	\$16,663	\$ 2.26
Rudderfish	1,297	1,297	\$1,639	\$ 1.26
Damselfish	178	141	\$309	\$ 2.19
Hawkfish	15	15	\$34	\$ 2.31

Table D-4
March 2004 Reported Commercial Landings (Cont.)

Species	Caught	Sold	Value	Price/Lb.
Tilapia	80	80	\$160	\$ 2.00
Wrasse	355	153	\$851	\$ 5.56
Parrotfish	2,806	2,806	\$7,552	\$ 2.69
Surgeon/tangs	8,945	7,387	\$12,081	\$ 1.64
Flounders	3	3	\$3	\$ 1.00
Filefish	922	79	\$80	\$ 1.01
Other pelagic	38,080	35,360	\$94,380	\$ 2.67
Rainbow runner	124	106	\$130	\$ 1.23
Mahimahi (dolphin)	410,501	410,501	\$779,947	\$ 1.90
Barracudas	3,461	2,341	\$3,291	\$ 1.41
Wahoo	59,440	59,389	\$186,541	\$ 3.14
Misc tunas	4,815	3	\$4	\$ 1.70
Skipjack tuna	39,389	39,389	\$71,643	\$ 1.82
Yellowfin tuna	168,242	168,242	\$458,397	\$ 2.72
Albacore	90,632	90,632	\$162,138	\$ 1.79
Bigeye tuna	724,924	724,924	\$2,496,061	\$ 3.44
Kawakawa	573	281	\$382	\$ 1.36
Other billfish	4,875	300	\$300	\$ 1.00
Broadbill swordfish	23,572	23,572	\$62,292	\$ 2.64
Blue marlin	88,904	87,224	\$117,537	\$ 1.35
Black marlin	1,109	591	\$1,100	\$ 1.86
Striped marlin	71,759	71,759	\$145,688	\$ 2.03
Shortnose spearfish	44,222	44,222	\$52,315	\$ 1.18
Sailfish	1,984	311	\$451	\$ 1.45
Spiny lobster	467	257	\$2,266	\$ 8.81
Slipper lobster	4	0	\$0	\$ 0.00
Crabs	1,698	1,026	\$3,998	\$ 3.90
Octopus	1,364	1,364	\$4,002	\$ 2.93
Squid	25	25	\$175	\$ 7.00
Limpets (saltwater)	391	300	\$925	\$ 3.08
Algae	1,114	825	\$2,904	\$ 3.52
TOTAL	2,125,185	2,011,349	\$5,151,989	\$ 2.56

Table D-5
April 2004 Reported Commercial Landings

Species	Caught	Sold	Value	Price/Lb.
Miscellaneous	262	262	\$942	\$ 3.60
Sharks	49,498	32,142	\$12,491	\$ 0.39
Rays	9	0	\$0	\$ 0.00
Eels	290	290	\$255	\$ 0.88
Bigeye scad (akule)	70,248	38,101	\$67,412	\$ 1.77
Mackerel scad	20,602	16,882	\$35,782	\$ 2.12
Leatherback	141	141	\$207	\$ 1.46
Ten pounder	17	17	\$17	\$ 1.00
Bonefish	111	74	\$86	\$ 1.16
Milkfish	111	111	\$135	\$ 1.22
Needlefish	28	23	\$43	\$ 1.85
Threadfin	62	62	\$291	\$ 4.69
Mullet	1,926	1,926	\$6,422	\$ 3.33
Pomfret	82,115	82,115	\$101,487	\$ 1.24
Oilfish	43,131	43,131	\$54,158	\$ 1.26
Jacks (misc)	368	33	\$164	\$ 5.05
Amberjack	680	47	\$57	\$ 1.21
Sasa ulua	56	17	\$41	\$ 2.43
Pig-lipped ulua	2,557	105	\$272	\$ 2.60
Dobe ulua	4,149	902	\$1,930	\$ 2.14
Papa ulua	478	121	\$271	\$ 2.24
White ulua	911	873	\$1,333	\$ 1.53
Black ulua	2,237	2,237	\$3,574	\$ 1.60
Blue crevally	471	238	\$674	\$ 2.83
Hawaiian grouper	5,264	1,659	\$8,120	\$ 4.89
Blue spot grouper	56	35	\$147	\$ 4.21
Snappers	221	129	\$413	\$ 3.19
Blue-lined snapper	2,957	1,058	\$1,202	\$ 1.14
Ehu (red snapper)	3,476	2,348	\$10,904	\$ 4.64
Gindai (flower snapper)	790	350	\$1,226	\$ 3.50
Golden kalekale	1,085	946	\$3,391	\$ 3.59
Lehi (silverjaw)	528	528	\$1,609	\$ 3.05
Onaga (red snapper)	9,664	8,504	\$52,746	\$ 6.20
Opakapaka (pink snapper)	13,959	9,337	\$51,465	\$ 5.51
Uku (gray snapper)	12,244	6,245	\$19,012	\$ 3.04
Porgy	24	24	\$58	\$ 2.45
Other reeffish	37	2	\$3	\$ 1.25
Reef jacks	4	4	\$12	\$ 3.00
Squirrelfish	3,289	3,289	\$11,371	\$ 3.46
Trumpetfish	7	7	\$13	\$ 1.70
Scorpionfish	267	267	\$850	\$ 3.18
Mountain bass	234	234	\$718	\$ 3.07
Bigeyes	1,292	1,292	\$3,180	\$ 2.46

Table D-5
April 2004 Reported Commercial Landings (Cont.)

Species	Caught	Sold	Value	Price/Lb.
Goatfish	2,486	2,486	\$6,262	\$ 2.52
Rudderfish	1,928	1,928	\$2,097	\$ 1.09
Damselfish	59	59	\$122	\$ 2.07
Hawkfish	24	24	\$51	\$ 2.12
Tilapia	125	125	\$188	\$ 1.50
Wrasse	466	262	\$1,155	\$ 4.41
Parrotfish	2,533	2,533	\$7,397	\$ 2.92
Surgeon/tangs	6,359	6,359	\$9,260	\$ 1.46
Flounders	2	2	\$2	\$ 1.00
Filefish	1,031	13	\$16	\$ 1.17
Other pelagic	31,753	30,557	\$78,597	\$ 2.57
Rainbow runner	232	206	\$251	\$ 1.22
Mahimahi (dolphin)	423,665	423,665	\$916,857	\$ 2.16
Barracudas	4,446	4,446	\$5,535	\$ 1.25
Wahoo	109,114	105,341	\$225,334	\$ 2.14
Misc tunas	13,073	13	\$23	\$ 1.75
Skipjack tuna	78,630	78,630	\$128,498	\$ 1.63
Yellowfin tuna	131,151	122,789	\$328,826	\$ 2.68
Albacore	9,270	8,117	\$24,260	\$ 2.99
Bigeye tuna	604,071	604,071	\$2,319,324	\$ 3.84
Kawakawa	1,352	965	\$1,514	\$ 1.57
Other billfish	438	136	\$204	\$ 1.50
Broadbill swordfish	42,701	42,701	\$88,290	\$ 2.07
Blue marlin	89,641	78,637	\$94,971	\$ 1.21
Black marlin	1,055	1,055	\$1,568	\$ 1.49
Striped marlin	69,912	69,825	\$138,216	\$ 1.98
Shortnose spearfish	42,514	42,514	\$47,888	\$ 1.13
Sailfish	1,685	329	\$346	\$ 1.05
Spiny lobster	1,286	1,205	\$14,090	\$11.70
Slipper lobster	15	0	\$0	\$ 0.00
Crabs	3,291	2,768	\$12,165	\$ 4.40
Octopus	1,054	1,054	\$3,343	\$ 3.17
Squid	143	143	\$254	\$ 1.78
Limpets (saltwater)	1,502	406	\$2,114	\$ 5.21
Invertebrates	3,954	3,954	\$118,605	\$30.00
Algae	797	437	\$1,694	\$ 3.87
TOTAL	2,017,604	1,893,857	\$5,033,799	\$ 2.66

Table D-6
May 2004 Reported Commercial Landings

Species	Caught	Sold	Value	Price/Lb.
Miscellaneous	339	168	\$423	\$ 2.52
Sharks	37,397	22,169	\$5,993	\$ 0.27
Eels	24	24	\$24	\$ 1.00
Bigeye scad (akule)	88,802	36,913	\$72,254	\$ 1.96
Mackerel scad	22,782	14,119	\$28,356	\$ 2.01
Leatherback	31	31	\$45	\$ 1.44
Ten pounder	179	179	\$180	\$ 1.00
Bonefish	129	107	\$110	\$ 1.03
Herring/sardine	2	0	\$0	\$ 0.00
Milkfish	137	137	\$171	\$ 1.24
Needlefish	55	55	\$93	\$ 1.68
Threadfin	13	13	\$59	\$ 4.68
Mullet	502	502	\$1,745	\$ 3.48
Pomfret	86,492	86,492	\$107,850	\$ 1.25
Oilfish	30,959	30,959	\$48,434	\$ 1.56
Jacks (misc)	121	77	\$397	\$ 5.16
Amberjack	1,145	62	\$82	\$ 1.32
Sasa ulua	142	142	\$372	\$ 2.62
Pig-lipped ulua	3,483	3,483	\$8,224	\$ 2.36
Dobe ulua	8	8	\$13	\$ 1.63
Papa ulua	335	159	\$360	\$ 2.27
White ulua	1,724	1,724	\$3,039	\$ 1.76
Black ulua	482	189	\$313	\$ 1.65
Blue crevally	2,178	845	\$1,443	\$ 1.71
Hawaiian grouper	6,830	6,830	\$26,165	\$ 3.83
Blue spot grouper	41	9	\$18	\$ 1.99
Snappers	186	133	\$367	\$ 2.75
Yellowtail kali	18	18	\$35	\$ 1.92
Blue-lined snapper	2,689	2,689	\$2,925	\$ 1.09
Ehu (red snapper)	2,909	2,909	\$10,736	\$ 3.69
Gindai (flower snapper)	722	722	\$2,396	\$ 3.32
Golden kalekale	850	639	\$2,198	\$ 3.44
Lehi (silverjaw)	96	96	\$229	\$ 2.39
Onaga (red snapper)	8,925	4,173	\$26,898	\$ 6.45
Opakapaka (pink snapper)	10,985	10,985	\$58,269	\$ 5.30
Uku (gray snapper)	26,409	20,924	\$52,366	\$ 2.50
Porgy	242	234	\$686	\$ 2.94
Other reeffish	27	0	\$0	\$ 0.00
Reef jacks	2	2	\$5	\$ 3.50
Squirrelfish	2,998	2,998	\$10,095	\$ 3.37
Trumpetfish	6	6	\$8	\$ 1.30
Scorpionfish	193	144	\$600	\$ 4.18
Mountain bass	375	166	\$706	\$ 4.26
Bigeyes	1,170	1,170	\$2,724	\$ 2.33

Table D-6
May 2004 Reported Commercial Landings (Cont.)

Species	Caught	Sold	Value	Price/Lb.
Goatfish	3,691	3,052	\$7,464	\$ 2.45
Rudderfish	1,723	1,696	\$1,821	\$ 1.07
Damselfish	178	102	\$246	\$ 2.41
Hawkfish	38	38	\$97	\$ 2.60
Tilapia	57	57	\$86	\$ 1.50
Wrasse	497	398	\$2,005	\$ 5.04
Parrotfish	3,163	2,516	\$6,941	\$ 2.76
Surgeon/tangs	5,473	3,794	\$6,312	\$ 1.66
Filefish	719	201	\$203	\$ 1.01
Other pelagic	51,635	51,635	\$94,323	\$ 1.83
Rainbow runner	245	235	\$558	\$ 2.38
Mahimahi (dolphin)	176,515	176,515	\$451,415	\$ 2.56
Barracudas	5,233	5,233	\$2,778	\$ 0.53
Wahoo	156,343	140,673	\$240,200	\$ 1.71
Misc tunas	17,285	0	\$0	\$ 0.00
Skipjack tuna	139,171	117,325	\$146,565	\$ 1.25
Yellowfin tuna	186,538	176,431	\$446,416	\$ 2.53
Albacore	29,768	28,786	\$54,818	\$ 1.90
Bigeye tuna	671,054	630,263	\$2,291,837	\$ 3.64
Kawakawa	1,078	591	\$825	\$ 1.40
Other billfish	876	330	\$525	\$ 1.59
Broadbill swordfish	65,452	65,452	\$157,726	\$ 2.41
Blue marlin	102,447	92,464	\$78,971	\$ 0.85
Black marlin	1,145	1,082	\$1,147	\$ 1.06
Striped marlin	99,162	99,162	\$107,720	\$ 1.09
Shortnose spearfish	44,431	44,431	\$27,538	\$ 0.62
Sailfish	901	152	\$143	\$ 0.94
Crabs	524	129	\$397	\$ 3.09
Octopus	1,462	1,219	\$3,245	\$ 2.66
Squid	140	44	\$118	\$ 2.67
Limpets (saltwater)	1,701	219	\$1,015	\$ 4.63
Invertebrates	960	0	\$0	\$ 0.00
Algae	853	491	\$2,400	\$ 4.89
TOTAL	2,113,587	1,898,117	\$4,613,256	\$ 2.43

Table D-7
June 2004 Reported Commercial Landings

Species	Caught	Sold	Value	Price/Lb.
Miscellaneous	207	207	\$459	\$ 2.22
Sharks	27,302	13,996	\$3,923	\$ 0.28
Eels	73	73	\$91	\$ 1.25
Bigeye scad (akule)	59,339	35,115	\$66,754	\$ 1.90
Mackerel scad	16,529	10,234	\$21,770	\$ 2.13
Leatherback	51	49	\$72	\$ 1.48
Ten pounder	3	3	\$3	\$ 1.00
Bonefish	365	315	\$328	\$ 1.04
Milkfish	31	24	\$30	\$ 1.25
Needlefish	22	19	\$36	\$ 1.94
Threadfin	12	12	\$48	\$ 4.00
Mullet	567	567	\$1,770	\$ 3.12
Pomfret	99,038	99,038	\$133,186	\$ 1.34
Oilfish	28,487	28,487	\$56,968	\$ 2.00
Jacks (misc)	131	6	\$11	\$ 2.00
Amberjack	754	9	\$14	\$ 1.50
Sasa ulua	45	45	\$100	\$ 2.24
Pig-lipped ulua	2,121	2,121	\$4,994	\$ 2.35
Dobe ulua	14	14	\$41	\$ 3.00
Papa ulua	367	268	\$655	\$ 2.45
White ulua	973	973	\$1,815	\$ 1.87
Black ulua	120	120	\$256	\$ 2.13
Blue crevally	955	823	\$1,509	\$ 1.83
Hawaiian grouper	5,016	5,016	\$17,643	\$ 3.52
Blue spot grouper	92	92	\$202	\$ 2.21
Snappers	227	207	\$466	\$ 2.25
Yellowtail kali	9	0	\$0	\$ 0.00
Blue-lined snapper	2,908	2,759	\$2,348	\$ 0.85
Ehu (red snapper)	2,144	2,144	\$8,525	\$ 3.98
Gindai (flower snapper)	517	517	\$1,578	\$ 3.06
Golden kalekale	582	582	\$1,744	\$ 2.99
Lehi (silverjaw)	148	148	\$533	\$ 3.61
Onaga (red snapper)	9,027	7,638	\$42,251	\$ 5.53
Opakapaka (pink snapper)	5,533	5,533	\$30,068	\$ 5.43
Uku (gray snapper)	20,401	15,342	\$41,711	\$ 2.72
Porgy	672	50	\$65	\$ 1.31
Other reeffish	8	0	\$0	\$ 0.00
Squirrelfish	3,193	3,193	\$10,424	\$ 3.26
Trumpetfish	3	3	\$4	\$ 1.48
Scorpionfish	83	65	\$227	\$ 3.50
Mountain bass	57	57	\$189	\$ 3.30
Bigeyes	1,882	1,083	\$2,610	\$ 2.41
Goatfish	6,031	3,520	\$7,939	\$ 2.26

Table D-7
June 2004 Reported Commercial Landings (Cont.)

Species	Caught	Sold	Value	Price/Lb.
Rudderfish	1,484	1,484	\$1,598	\$ 1.08
Damselfish	173	173	\$473	\$ 2.73
Hawkfish	46	46	\$107	\$ 2.33
Tilapia	50	50	\$75	\$ 1.50
Wrasse	548	548	\$1,362	\$ 2.49
Parrotfish	2,580	2,580	\$6,946	\$ 2.69
Surgeon/tangs	6,185	6,185	\$9,564	\$ 1.55
Flounders	3	0	\$0	\$ 0.00
Filefish	399	399	\$353	\$ 0.88
Other pelagic	35,178	35,178	\$82,824	\$ 2.35
Rainbow runner	463	380	\$736	\$ 1.93
Mahimahi (dolphin)	89,289	89,289	\$319,817	\$ 3.58
Barracudas	5,223	3,743	\$2,210	\$ 0.59
Wahoo	119,774	119,697	\$273,368	\$ 2.28
Misc tunas	3,761	7	\$13	\$ 1.75
Skipjack tuna	135,336	135,336	\$166,401	\$ 1.23
Yellowfin tuna	288,831	288,831	\$651,875	\$ 2.26
Albacore	29,435	28,716	\$60,249	\$ 2.10
Bigeye tuna	852,868	852,868	\$2,719,364	\$ 3.19
Kawakawa	431	99	\$156	\$ 1.59
Other billfish	2,512	0	\$0	\$ 0.00
Broadbill swordfish	78,583	78,583	\$214,203	\$ 2.73
Blue marlin	119,240	119,240	\$155,640	\$ 1.31
Black marlin	837	717	\$1,111	\$ 1.55
Striped marlin	38,655	30,427	\$61,974	\$ 2.04
Shortnose spearfish	31,476	31,476	\$41,188	\$ 1.31
Sailfish	1,136	1,031	\$1,621	\$ 1.57
Spiny lobster	24	24	\$168	\$ 7.00
Crabs	1,081	216	\$1,069	\$ 4.96
Octopus	2,066	1,951	\$5,522	\$ 2.83
Squid	103	103	\$199	\$ 1.94
Limpets (saltwater)	503	298	\$1,600	\$ 5.37
Invertebrates	4,792	4,792	\$142,406	\$29.72
Algae	1,002	681	\$2,969	\$ 4.36
TOTAL	2,150,101	2,075,611	\$5,390,520	\$ 2.60

Table D-8
July 2004 Reported Commercial Landings

Species	Caught	Sold	Value	Price/Lb.
Miscellaneous	1,173	348	\$731	\$ 2.10
Sharks	32,535	22,928	\$5,310	\$ 0.23
Eels	78	78	\$111	\$ 1.43
Bigeye scad (akule)	85,138	25,778	\$52,745	\$ 2.05
Mackerel scad	13,743	9,333	\$19,717	\$ 2.11
Leatherback	17	17	\$26	\$ 1.50
Ten pounder	39	0	\$0	\$ 0.00
Bonefish	25	25	\$55	\$ 2.21
Milkfish	91	34	\$40	\$ 1.18
Needlefish	58	12	\$21	\$ 1.80
Threadfin	8	0	\$0	\$ 0.00
Mullet	1,336	1,336	\$4,469	\$ 3.34
Pomfret	86,784	86,784	\$156,174	\$ 1.80
Oilfish	19,516	19,516	\$45,268	\$ 2.32
Jacks (misc)	170	28	\$49	\$ 1.77
Amberjack	464	16	\$12	\$ 0.75
Sasa ulua	44	24	\$53	\$ 2.24
Pig-lipped ulua	3,916	3,916	\$7,355	\$ 1.88
Dobe ulua	3	3	\$8	\$ 2.41
Papa ulua	393	393	\$1,105	\$ 2.81
White ulua	1,194	1,194	\$2,437	\$ 2.04
Black ulua	106	18	\$31	\$ 1.75
Blue crevally	562	353	\$838	\$ 2.38
Hawaiian grouper	4,091	4,091	\$18,861	\$ 4.61
Blue spot grouper	75	35	\$79	\$ 2.28
Snappers	1,684	612	\$2,364	\$ 3.86
Blue-lined snapper	5,136	5,136	\$5,985	\$ 1.17
Ehu (red snapper)	5,319	5,319	\$17,075	\$ 3.21
Gindai (flower snapper)	558	558	\$1,796	\$ 3.22
Golden kalekale	564	522	\$1,586	\$ 3.04
Lehi (silverjaw)	97	89	\$277	\$ 3.11
Onaga (red snapper)	16,193	14,869	\$68,749	\$ 4.62
Opakapaka (pink snapper)	8,383	8,383	\$42,635	\$ 5.09
Uku (gray snapper)	23,426	23,426	\$58,568	\$ 2.50
Snake mackerel	4	4	\$2	\$ 0.50
Porgy	47	47	\$112	\$ 2.38
Reef jacks	1	0	\$0	\$ 0.00
Squirrelfish	4,277	4,277	\$13,961	\$ 3.26
Scorpionfish	359	359	\$1,229	\$ 3.42
Mountain bass	188	12	\$28	\$ 2.28
Bigeyes	1,812	1,812	\$3,682	\$ 2.03
Goatfish	5,032	4,971	\$11,707	\$ 2.36
Rudderfish	4,544	3,660	\$3,739	\$ 1.02

Table D-8
July 2004 Reported Commercial Landings (Cont.)

Species	Caught	Sold	Value	Price/Lb.
Damselfish	261	261	\$689	\$ 2.64
Hawkfish	89	89	\$213	\$ 2.39
Tilapia	125	125	\$228	\$ 1.82
Wrasse	435	304	\$1,251	\$ 4.12
Parrotfish	5,244	5,244	\$14,127	\$ 2.69
Surgeon/tangs	11,544	11,077	\$15,077	\$ 1.36
Flounders	8	8	\$9	\$ 1.06
Filefish	148	148	\$146	\$ 0.98
Other pelagic	53,999	53,999	\$112,395	\$ 2.08
Rainbow runner	497	497	\$1,159	\$ 2.33
Mahimahi (dolphin)	74,666	74,666	\$254,884	\$ 3.41
Barracudas	8,028	7,853	\$4,855	\$ 0.62
Wahoo	91,066	88,181	\$257,349	\$ 2.92
Misc tunas	5,242	0	\$0	\$ 0.00
Skipjack tuna	110,038	85,452	\$121,852	\$ 1.43
Yellowfin tuna	463,692	463,692	\$1,153,908	\$ 2.49
Albacore	185,983	185,983	\$224,821	\$ 1.21
Bigeye tuna	571,761	571,761	\$2,076,394	\$ 3.63
Kawakawa	399	143	\$106	\$ 0.74
Other billfish	457	0	\$0	\$ 0.00
Broadbill swordfish	52,220	52,220	\$137,661	\$ 2.64
Blue marlin	103,654	103,654	\$146,492	\$ 1.41
Black marlin	2,096	986	\$1,674	\$ 1.70
Striped marlin	44,901	44,901	\$87,801	\$ 1.96
Shortnose spearfish	31,354	31,354	\$37,930	\$ 1.21
Sailfish	2,087	1,581	\$2,213	\$ 1.40
Crabs	2,093	274	\$955	\$ 3.48
Octopus	1,894	1,409	\$4,098	\$ 2.91
Squid	20	20	\$50	\$ 2.50
Limpets (saltwater)	152	152	\$744	\$ 4.88
Invertebrates	1,409	30	\$89	\$ 3.00
Algae	1,841	213	\$1,488	\$ 6.98
TOTAL	2,156,578	2,036,586	\$5,209,646	\$ 2.56

Table D-9
August 2004 Reported Commercial Landings

Species	Caught	Sold	Value	Price/Lb.
Miscellaneous	344	344	\$556	\$ 1.62
Sharks	33,332	13,802	\$6,189	\$ 0.45
Eels	167	167	\$182	\$ 1.08
Armorhead	4	0	\$0	\$ 0.00
Bigeye scad (akule)	56,419	25,172	\$49,563	\$ 1.97
Mackerel scad	16,144	14,160	\$29,096	\$ 2.05
Leatherback	14	14	\$20	\$ 1.40
Ten pounder	36	3	\$3	\$ 0.98
Bonefish	72	72	\$87	\$ 1.21
Milkfish	446	446	\$509	\$ 1.14
Mullet	956	956	\$3,420	\$ 3.58
Pomfret	64,115	61,243	\$131,574	\$ 2.15
Oilfish	16,221	15,537	\$38,674	\$ 2.49
Jacks (misc)	92	10	\$5	\$ 0.46
Amberjack	309	13	\$20	\$ 1.50
Sasa ulua	57	57	\$123	\$ 2.16
Pig-lipped ulua	1,577	1,544	\$3,980	\$ 2.58
Dobe ulua	6	5	\$16	\$ 3.08
Papa ulua	994	436	\$1,090	\$ 2.50
White ulua	2,685	681	\$929	\$ 1.37
Black ulua	30	30	\$52	\$ 1.75
Blue crevally	678	378	\$764	\$ 2.02
Hawaiian grouper	3,994	3,994	\$18,325	\$ 4.59
Blue spot grouper	61	41	\$86	\$ 2.12
Snappers	308	200	\$640	\$ 3.21
Blue-lined snapper	7,432	1,395	\$1,539	\$ 1.10
Ehu (red snapper)	2,399	2,399	\$9,282	\$ 3.87
Gindai (flower snapper)	662	662	\$2,214	\$ 3.34
Golden kalekale	654	654	\$2,153	\$ 3.29
Lehi (silverjaw)	99	68	\$235	\$ 3.48
Onaga (red snapper)	12,021	12,021	\$65,467	\$ 5.45
Opakapaka (pink snapper)	8,160	7,307	\$39,407	\$ 5.39
Uku (gray snapper)	12,268	12,268	\$34,110	\$ 2.78
Porgy	69	69	\$222	\$ 3.21
Squirrelfish	2,717	2,332	\$7,732	\$ 3.32
Trumpetfish	7	0	\$0	\$ 0.00
Scorpionfish	248	248	\$845	\$ 3.41
Mountain bass	291	284	\$1,338	\$ 4.70
Bigeyes	4,042	1,779	\$3,027	\$ 1.70
Goatfish	5,237	3,360	\$8,327	\$ 2.48
Rudderfish	3,890	3,366	\$3,493	\$ 1.04
Damselfish	298	298	\$829	\$ 2.78
Hawkfish	99	99	\$238	\$ 2.42

Table D-9
August 2004 Reported Commercial Landings (Cont.)

Species	Caught	Sold	Value	Price/Lb.
Tilapia	129	129	\$229	\$ 1.77
Wrasse	512	336	\$1,640	\$ 4.89
Parrotfish	3,446	3,446	\$8,810	\$ 2.56
Surgeon/tangs	10,799	8,558	\$12,849	\$ 1.50
Flounders	2	2	\$3	\$ 1.25
Filefish	126	69	\$70	\$ 1.02
Other pelagic	84,862	80,322	\$149,157	\$ 1.86
Rainbow runner	434	434	\$676	\$ 1.56
Mahimahi (dolphin)	93,576	88,981	\$279,336	\$ 3.14
Barracudas	4,509	4,509	\$3,710	\$ 0.82
Wahoo	79,626	71,745	\$226,966	\$ 3.16
Misc tunas	2,037	34	\$144	\$ 4.31
Skipjack tuna	145,859	130,992	\$184,615	\$ 1.41
Yellowfin tuna	365,353	365,353	\$912,402	\$ 2.50
Albacore	267,613	267,613	\$296,894	\$ 1.11
Bigeye tuna	614,865	549,259	\$1,764,597	\$ 3.21
Kawakawa	695	351	\$415	\$ 1.18
Other billfish	655	0	\$0	\$ 0.00
Broadbill swordfish	27,409	26,120	\$78,688	\$ 3.01
Blue marlin	99,948	97,802	\$131,944	\$ 1.35
Black marlin	1,019	1,019	\$2,207	\$ 2.17
Striped marlin	29,931	27,435	\$59,835	\$ 2.18
Shortnose spearfish	22,950	22,658	\$34,282	\$ 1.51
Sailfish	1,207	1,109	\$1,657	\$ 1.49
Crabs	2,717	431	\$1,479	\$ 3.43
Octopus	2,571	2,160	\$6,418	\$ 2.97
Squid	75	55	\$120	\$ 2.17
Limpets (saltwater)	1,077	847	\$9,488	\$11.21
Invertebrates	1,259	14	\$42	\$ 3.00
Algae	4,805	618	\$2,412	\$ 3.90
TOTAL	2,129,722	1,940,311	\$4,637,442	\$ 2.39

Table D-10
September 2004 Reported Commercial Landings

Species	Caught	Sold	Value	Price/Lb.
Miscellaneous	282	282	\$529	\$ 1.88
Sharks	92,874	10,243	\$4,569	\$ 0.45
Rays	9	0	\$0	\$ 0.00
Eels	13	13	\$13	\$ 1.00
Bigeye scad (akule)	51,742	15,649	\$35,301	\$ 2.26
Mackerel scad	30,874	13,996	\$27,584	\$ 1.97
Leatherback	22	22	\$33	\$ 1.50
Ten pounder	101	0	\$0	\$ 0.00
Bonefish	150	150	\$225	\$ 1.50
Milkfish	50	46	\$56	\$ 1.23
Flying fish	4	4	\$5	\$ 1.25
Needlefish	83	20	\$28	\$ 1.40
Threadfin	62	61	\$278	\$ 4.57
Mullet	2,724	2,724	\$8,431	\$ 3.10
Pomfret	55,328	55,328	\$105,764	\$ 1.91
Oilfish	13,287	13,287	\$27,745	\$ 2.09
Jacks (misc)	208	7	\$15	\$ 2.20
Amberjack	214	98	\$221	\$ 2.25
Sasa ulua	63	63	\$160	\$ 2.54
Pig-lipped ulua	234	190	\$643	\$ 3.38
Dobe ulua	14	14	\$42	\$ 2.93
Papa ulua	1,169	263	\$473	\$ 1.80
White ulua	2,198	1,185	\$2,023	\$ 1.71
Black ulua	206	175	\$306	\$ 1.75
Blue crevally	981	882	\$1,675	\$ 1.90
Hawaiian grouper	1,150	1,150	\$5,747	\$ 5.00
Blue spot grouper	31	26	\$62	\$ 2.38
Snappers	146	117	\$306	\$ 2.62
Blue-lined snapper	6,900	2,103	\$2,398	\$ 1.14
Ehu (red snapper)	2,009	2,009	\$9,189	\$ 4.57
Gindai (flower snapper)	303	303	\$1,224	\$ 4.04
Golden kalekale	770	754	\$2,912	\$ 3.86
Lehi (silverjaw)	587	587	\$1,887	\$ 3.22
Onaga (red snapper)	15,495	12,684	\$68,127	\$ 5.37
Opakapaka (pink snapper)	7,664	7,664	\$40,213	\$ 5.25
Uku (gray snapper)	15,107	15,107	\$40,435	\$ 2.68
Porgy	155	111	\$227	\$ 2.04
Other reeffish	22	0	\$0	\$ 0.00
Reef jacks	46	46	\$138	\$ 3.00
Squirrelfish	4,693	4,693	\$15,307	\$ 3.26
Trumpetfish	12	2	\$2	\$ 1.50

Table D-10
September 2004 Reported Commercial Landings (Cont.)

Species	Caught	Sold	Value	Price/Lb.
Scorpionfish	261	261	\$957	\$ 3.66
Mountain bass	118	118	\$435	\$ 3.70
Bigeyes	1,467	1,101	\$2,921	\$ 2.65
Goatfish	4,886	3,779	\$10,606	\$ 2.81
Rudderfish	718	626	\$714	\$ 1.14
Damselfish	325	325	\$925	\$ 2.85
Hawkfish	58	58	\$140	\$ 2.41
Wrasse	778	706	\$3,481	\$ 4.93
Parrotfish	3,391	3,391	\$8,925	\$ 2.63
Surgeon/tangs	7,680	4,903	\$7,758	\$ 1.58
Filefish	85	85	\$87	\$ 1.02
Other pelagic	123,742	123,742	\$114,451	\$ 0.92
Rainbow runner	687	682	\$935	\$ 1.37
Mahimahi (dolphin)	118,141	118,141	\$267,777	\$ 2.27
Barracudas	5,254	3,538	\$4,104	\$ 1.16
Wahoo	71,428	71,428	\$191,517	\$ 2.68
Misc tunas	1,725	6	\$10	\$ 1.50
Skipjack tuna	111,380	90,370	\$100,837	\$ 1.12
Yellowfin tuna	334,248	334,248	\$665,532	\$ 1.99
Albacore	131,243	131,243	\$123,093	\$ 0.94
Bigeye tuna	658,561	658,561	\$1,672,395	\$ 2.54
Kawakawa	339	214	\$281	\$ 1.32
Other billfish	1,121	0	\$0	\$ 0.00
Broadbill swordfish	13,936	13,252	\$34,497	\$ 2.60
Blue marlin	75,460	75,460	\$82,796	\$ 1.10
Black marlin	440	141	\$282	\$ 2.00
Striped marlin	28,224	26,333	\$48,888	\$ 1.86
Shortnose spearfish	21,910	21,910	\$21,573	\$ 0.98
Sailfish	1,276	1,276	\$1,066	\$ 0.84
Spiny lobster	1,769	1,769	\$20,845	\$11.78
Slipper lobster	7	7	\$56	\$ 8.00
Crabs	3,694	970	\$3,793	\$ 3.91
Octopus	3,705	2,961	\$8,981	\$ 3.03
Squid	49	49	\$82	\$ 1.66
Limpets (saltwater)	584	584	\$6,924	\$11.86
Invertebrates	1,332	87	\$261	\$ 3.00
Algae	1,673	554	\$1,966	\$ 3.55
TOTAL	2,039,673	1,854,936	\$3,814,182	\$ 2.06

Table D-11
October 2004 Reported Commercial Landings

Species	Caught	Sold	Value	Price/Lb.
Miscellaneous	80	80	\$314	\$ 3.95
Sharks	73,441	18,720	\$5,434	\$ 0.29
Eels	34	34	\$29	\$ 0.84
Bigeye scad (akule)	42,330	28,354	\$55,124	\$ 1.94
Mackerel scad	32,042	24,103	\$48,194	\$ 2.00
Leatherback	42	42	\$62	\$ 1.49
Ten pounder	4	0	\$0	\$ 0.00
Bonefish	1,552	1,552	\$1,554	\$ 1.00
Milkfish	9	9	\$3	\$ 0.34
Needlefish	82	26	\$58	\$ 2.21
Threadfin	36	0	\$0	\$ 0.00
Mullet	733	683	\$2,441	\$ 3.57
Pomfret	65,515	59,171	\$106,798	\$ 1.80
Oilfish	18,605	16,362	\$36,306	\$ 2.22
Jacks (misc)	314	20	\$42	\$ 2.07
Amberjack	2,474	0	\$0	\$ 0.00
Sasa ulua	24	24	\$57	\$ 2.36
Pig-lipped ulua	3,116	3,061	\$6,674	\$ 2.18
Dobe ulua	26	21	\$59	\$ 2.79
Papa ulua	765	93	\$280	\$ 3.01
White ulua	1,883	1,072	\$1,608	\$ 1.50
Blue crevally	662	662	\$1,275	\$ 1.93
Hawaiian grouper	4,973	4,721	\$19,413	\$ 4.11
Blue spot grouper	34	32	\$71	\$ 2.23
Snappers	85	85	\$226	\$ 2.66
Blue-lined snapper	4,024	2,041	\$2,298	\$ 1.13
Ehu (red snapper)	2,602	2,395	\$9,841	\$ 4.11
Gindai (flower snapper)	691	625	\$2,022	\$ 3.24
Golden kalekale	702	702	\$2,241	\$ 3.19
Lehi (silverjaw)	744	744	\$3,039	\$ 4.09
Onaga (red snapper)	17,657	17,657	\$88,546	\$ 5.01
Opakapaka (pink snapper)	14,152	14,152	\$66,563	\$ 4.70
Uku (gray snapper)	12,787	10,802	\$29,967	\$ 2.77
Porgy	249	149	\$310	\$ 2.08
Other reeffish	4	0	\$0	\$ 0.00
Squirrelfish	4,372	4,372	\$14,660	\$ 3.35
Trumpetfish	12	2	\$2	\$ 1.00
Scorpionfish	274	274	\$1,119	\$ 4.08
Mountain bass	220	220	\$858	\$ 3.90
Bigeyes	956	783	\$2,037	\$ 2.60
Goatfish	5,233	3,952	\$9,917	\$ 2.51
Rudderfish	378	277	\$463	\$ 1.67
Damselfish	161	91	\$232	\$ 2.56

Table D-11
October 2004 Reported Commercial Landings (Cont.)

Species	Caught	Sold	Value	Price/Lb.
Hawkfish	7	7	\$18	\$ 2.79
Wrasse	411	411	\$1,874	\$ 4.56
Parrotfish	2,432	1,974	\$5,283	\$ 2.68
Surgeon/tangs	7,455	4,284	\$6,709	\$ 1.57
Flounders	3	3	\$3	\$ 1.00
Filefish	45	45	\$45	\$ 1.00
Other pelagic	124,847	119,383	\$142,302	\$ 1.19
Rainbow runner	409	409	\$1,247	\$ 3.05
Mahimahi (dolphin)	148,727	137,208	\$334,776	\$ 2.44
Barracudas	1,568	1,152	\$1,175	\$ 1.02
Wahoo	61,687	54,289	\$160,647	\$ 2.96
Misc tunas	1,928	212	\$2,139	\$10.10
Skipjack tuna	93,691	49,910	\$45,665	\$ 0.91
Yellowfin tuna	430,275	411,908	\$696,713	\$ 1.69
Albacore	144,462	144,462	\$140,270	\$ 0.97
Bigeye tuna	1,107,399	986,430	\$1,921,973	\$ 1.95
Kawakawa	431	73	\$123	\$ 1.69
Other billfish	1,060	0	\$0	\$ 0.00
Broadbill swordfish	16,995	11,791	\$31,400	\$ 2.66
Blue marlin	67,984	59,821	\$77,391	\$ 1.29
Black marlin	427	241	\$118	\$ 0.49
Striped marlin	73,274	65,008	\$83,019	\$ 1.28
Shortnose spearfish	20,091	19,555	\$28,212	\$ 1.44
Sailfish	1,355	1,119	\$1,428	\$ 1.28
Spiny lobster	874	731	\$6,827	\$ 9.35
Crabs	1,758	1,758	\$6,635	\$ 3.77
Shrimp (saltwater)	325	30	\$270	\$ 9.00
Octopus	3,430	3,412	\$10,817	\$ 3.17
Squid	155	8	\$18	\$ 2.25
Limpets (saltwater)	424	424	\$3,499	\$ 8.25
Invertebrates	732	49	\$147	\$ 3.00
Algae	684	417	\$1,342	\$ 3.22
TOTAL	2,629,415	2,294,681	\$4,232,221	\$ 1.84

Table D-12
November 2004 Reported Commercial Landings

Species	Caught	Sold	Value	Price/Lb.
Miscellaneous	87	87	\$274	\$ 3.17
Sharks	29,792	16,140	\$3,880	\$ 0.24
Eels	37	35	\$47	\$ 1.34
Bigeye scad (akule)	37,365	14,331	\$29,213	\$ 2.04
Mackerel scad	22,374	15,851	\$32,138	\$ 2.03
Leatherback	115	115	\$161	\$ 1.39
Ten pounder	58	0	\$0	\$ 0.00
Bonefish	116	71	\$101	\$ 1.43
Milkfish	244	212	\$265	\$ 1.25
Flying fish	11	1	\$1	\$ 1.00
Needlefish	89	0	\$9	\$28.33
Threadfin	17	6	\$33	\$ 5.22
Mullet	1,616	1,616	\$5,093	\$ 3.15
Pomfret	38,568	38,568	\$84,083	\$ 2.18
Oilfish	28,259	28,259	\$34,806	\$ 1.23
Jacks (misc)	301	105	\$246	\$ 2.35
Amberjack	831	20	\$15	\$ 0.75
Sasa ulua	44	44	\$101	\$ 2.30
Pig-lipped ulua	1,042	791	\$1,970	\$ 2.49
Dobe ulua	48	48	\$113	\$ 2.36
Papa ulua	799	435	\$1,156	\$ 2.66
White ulua	973	973	\$1,454	\$ 1.49
Black ulua	49	49	\$100	\$ 2.04
Blue crevally	582	582	\$1,097	\$ 1.88
Hawaiian grouper	4,416	3,981	\$17,385	\$ 4.37
Blue spot grouper	52	3	\$6	\$ 2.01
Snappers	110	77	\$193	\$ 2.51
Blue-lined snapper	2,291	2,141	\$2,215	\$ 1.03
Ehu (red snapper)	3,604	3,604	\$13,860	\$ 3.85
Gindai (flower snapper)	521	521	\$1,901	\$ 3.65
Golden kalekale	1,078	1,078	\$3,071	\$ 2.85
Lehi (silverjaw)	1,836	1,836	\$6,429	\$ 3.50
Onaga (red snapper)	20,037	19,362	\$97,462	\$ 5.03
Opakapaka (pink snapper)	21,656	20,140	\$92,205	\$ 4.58
Uku (gray snapper)	11,942	10,465	\$27,710	\$ 2.65
Porgy	112	112	\$187	\$ 1.66
Squirrelfish	3,020	3,020	\$10,039	\$ 3.32
Trumpetfish	12	12	\$24	\$ 2.00
Scorpionfish	285	208	\$943	\$ 4.53
Mountain bass	165	165	\$567	\$ 3.44
Bigeyes	760	760	\$1,807	\$ 2.38
Goatfish	4,141	3,962	\$10,836	\$ 2.74
Rudderfish	884	806	\$831	\$ 1.03

Table D-12
November 2004 Reported Commercial Landings (Cont.)

Species	Caught	Sold	Value	Price/Lb.
Damselfish	87	72	\$174	\$ 2.42
Hawkfish	7	7	\$20	\$ 2.79
Tilapia	341	341	\$512	\$ 1.50
Wrasse	351	351	\$1,751	\$ 5.00
Parrotfish	2,728	1,555	\$4,437	\$ 2.85
Surgeon/tangs	7,081	5,721	\$8,196	\$ 1.43
Filefish	52	52	\$55	\$ 1.06
Other pelagic	91,515	91,515	\$129,460	\$ 1.41
Rainbow runner	479	479	\$721	\$ 1.50
Mahimahi (dolphin)	246,585	239,144	\$386,206	\$ 1.62
Barracudas	838	526	\$665	\$ 1.26
Wahoo	31,923	30,029	\$98,065	\$ 3.27
Misc tunas	961	0	\$0	\$ 0.00
Skipjack tuna	68,458	50,054	\$39,888	\$ 0.80
Yellowfin tuna	151,117	150,029	\$263,345	\$ 1.76
Albacore	65,431	65,431	\$98,138	\$ 1.50
Bigeye tuna	1,330,510	1,316,948	\$2,945,919	\$ 2.24
Kawakawa	746	157	\$185	\$ 1.18
Other billfish	1,800	0	\$0	\$ 0.00
Broadbill swordfish	14,074	13,000	\$34,369	\$ 2.64
Blue marlin	54,847	35,167	\$32,877	\$ 0.93
Black marlin	182	0	\$0	\$ 0.00
Striped marlin	134,343	134,343	\$121,125	\$ 0.90
Shortnose spearfish	21,660	21,660	\$21,655	\$ 1.00
Sailfish	1,411	203	\$121	\$ 0.60
Spiny lobster	863	186	\$2,170	\$11.65
Crabs	2,146	1,912	\$7,632	\$ 3.99
Shrimp (saltwater)	112	0	\$0	\$ 0.00
Octopus	1,783	1,727	\$5,373	\$ 3.11
Squid	89	89	\$150	\$ 1.69
Limpets (saltwater)	508	42	\$474	\$11.23
Invertebrates	137	0	\$0	\$ 0.00
Algae	717	440	\$1,446	\$ 3.29
TOTAL	2,474,216	2,351,769	\$4,689,154	\$ 1.99

Table D-13
December 2004 Reported Commercial Landings

Species	Caught	Sold	Value	Price/Lb.
Miscellaneous	60	60	\$143	\$ 2.40
Sharks	43,104	20,714	\$3,180	\$ 0.15
Eels	13	9	\$9	\$ 1.00
Bigeye scad (akule)	24,656	9,118	\$21,141	\$ 2.32
Mackerel scad	19,686	13,053	\$26,776	\$ 2.05
Leatherback	15	9	\$14	\$ 1.69
Ten pounder	5	5	\$6	\$ 1.25
Bonefish	331	10	\$10	\$ 1.00
Milkfish	48	48	\$45	\$ 0.95
Needlefish	5	5	\$5	\$ 1.00
Threadfin	5	5	\$9	\$ 1.75
Mullet	143	143	\$652	\$ 4.56
Pomfret	36,497	36,497	\$93,614	\$ 2.57
Oilfish	33,752	33,752	\$53,142	\$ 1.57
Jacks (misc)	255	4	\$10	\$ 2.80
Amberjack	937	8	\$12	\$ 1.50
Sasa ulua	37	0	\$0	\$ 0.00
Pig-lipped ulua	3,584	3,584	\$9,509	\$ 2.65
Dobe ulua	5,343	1,225	\$1,623	\$ 1.32
Papa ulua	1,273	195	\$583	\$ 2.99
White ulua	2,752	2,752	\$3,724	\$ 1.35
Black ulua	35	35	\$70	\$ 2.02
Blue crevally	205	145	\$332	\$ 2.29
Hawaiian grouper	4,075	3,864	\$18,094	\$ 4.68
Blue spot grouper	75	27	\$68	\$ 2.50
Snappers	49	35	\$96	\$ 2.75
Yellowtail kali	26	0	\$0	\$ 0.00
Blue-lined snapper	3,450	1,536	\$1,483	\$ 0.97
Ehu (red snapper)	5,010	4,603	\$23,503	\$ 5.11
Gindai (flower snapper)	533	491	\$1,700	\$ 3.46
Golden kalekale	1,732	1,386	\$4,096	\$ 2.95
Lehi (silverjaw)	1,122	836	\$2,963	\$ 3.55
Onaga (red snapper)	25,202	22,021	\$145,073	\$ 6.59
Opakapaka (pink snapper)	21,894	19,824	\$113,107	\$ 5.71
Uku (gray snapper)	10,717	10,717	\$39,250	\$ 3.66
Porgy	90	90	\$81	\$ 0.90
Other reef fish	12	0	\$0	\$ 0.00
Squirrelfish	2,090	2,090	\$6,944	\$ 3.32
Scorpionfish	503	319	\$1,532	\$ 4.80
Mountain bass	125	125	\$610	\$ 4.90
Bigeyes	531	531	\$1,221	\$ 2.30
Goatfish	4,154	3,099	\$7,863	\$ 2.54
Rudderfish	643	643	\$715	\$ 1.11

Table D-13
December 2004 Reported Commercial Landings (Cont.)

Species	Caught	Sold	Value	Price/Lb.
Damselfish	9	9	\$22	\$ 2.57
Hawkfish	2	2	\$2	\$ 1.26
Wrasse	331	201	\$1,148	\$ 5.72
Parrotfish	1,605	1,605	\$3,883	\$ 2.42
Surgeon/tangs	6,944	5,459	\$8,235	\$ 1.51
Filefish	43	43	\$43	\$ 1.00
Other pelagic	77,593	77,593	\$142,770	\$ 1.84
Rainbow runner	279	253	\$257	\$ 1.02
Mahimahi (dolphin)	203,562	191,238	\$288,124	\$ 1.51
Barracudas	719	557	\$541	\$ 0.97
Wahoo	53,794	49,433	\$139,178	\$ 2.82
Misc tunas	999	12	\$19	\$ 1.60
Skipjack tuna	120,015	49,053	\$39,251	\$ 0.80
Yellowfin tuna	291,545	291,545	\$638,979	\$ 2.19
Albacore	80,870	80,870	\$118,277	\$ 1.46
Bigeye tuna	1,655,682	1,542,929	\$3,663,605	\$ 2.37
Kawakawa	816	185	\$368	\$ 1.99
Other billfish	270	0	\$0	\$ 0.00
Broadbill swordfish	178,665	173,422	\$327,833	\$ 1.89
Blue marlin	35,538	25,441	\$30,795	\$ 1.21
Black marlin	906	906	\$1,321	\$ 1.46
Striped marlin	110,307	110,307	\$173,135	\$ 1.57
Shortnose spearfish	64,092	64,092	\$39,634	\$ 0.62
Sailfish	2,508	183	\$204	\$ 1.12
Spiny lobster	1,330	485	\$6,287	\$12.96
Crabs	1,231	1,231	\$4,729	\$ 3.84
Shrimp (saltwater)	441	0	\$0	\$ 0.00
Octopus	1,063	830	\$2,559	\$ 3.08
Squid	3	0	\$0	\$ 0.00
Limpets (saltwater)	454	142	\$706	\$ 4.98
Algae	810	234	\$969	\$ 4.14
TOTAL	3,147,194	2,861,867	\$6,215,882	\$ 2.17

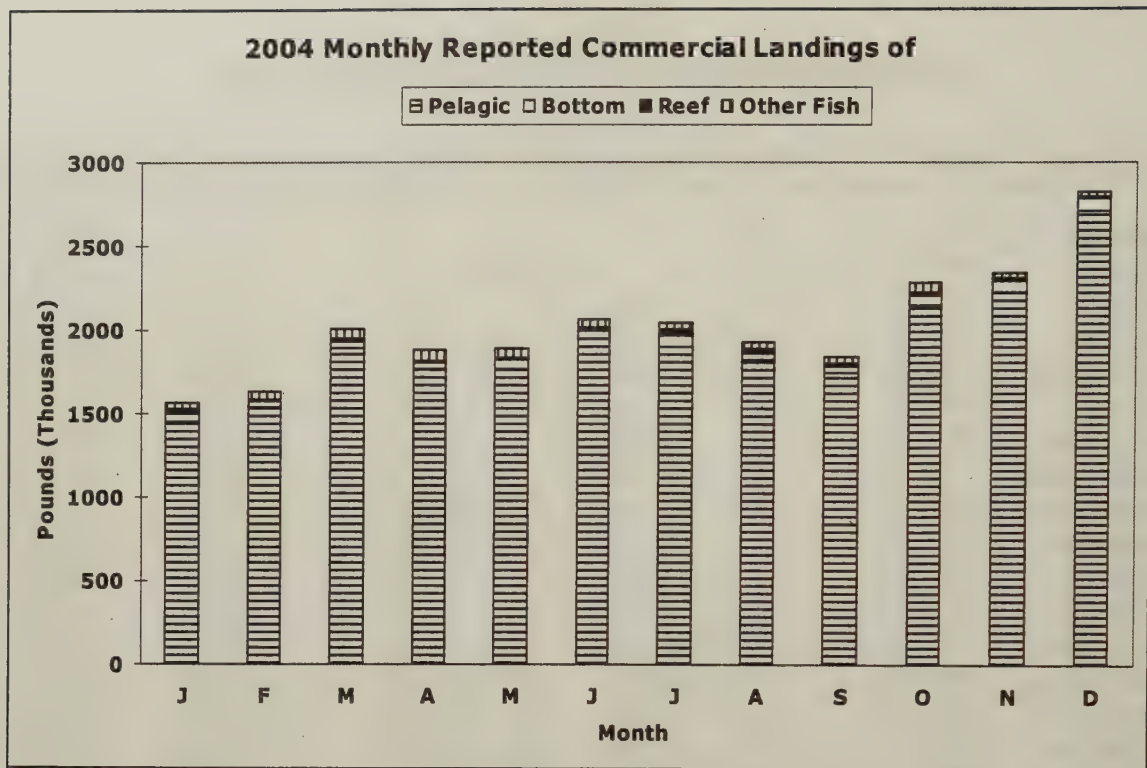


Figure D-1-1

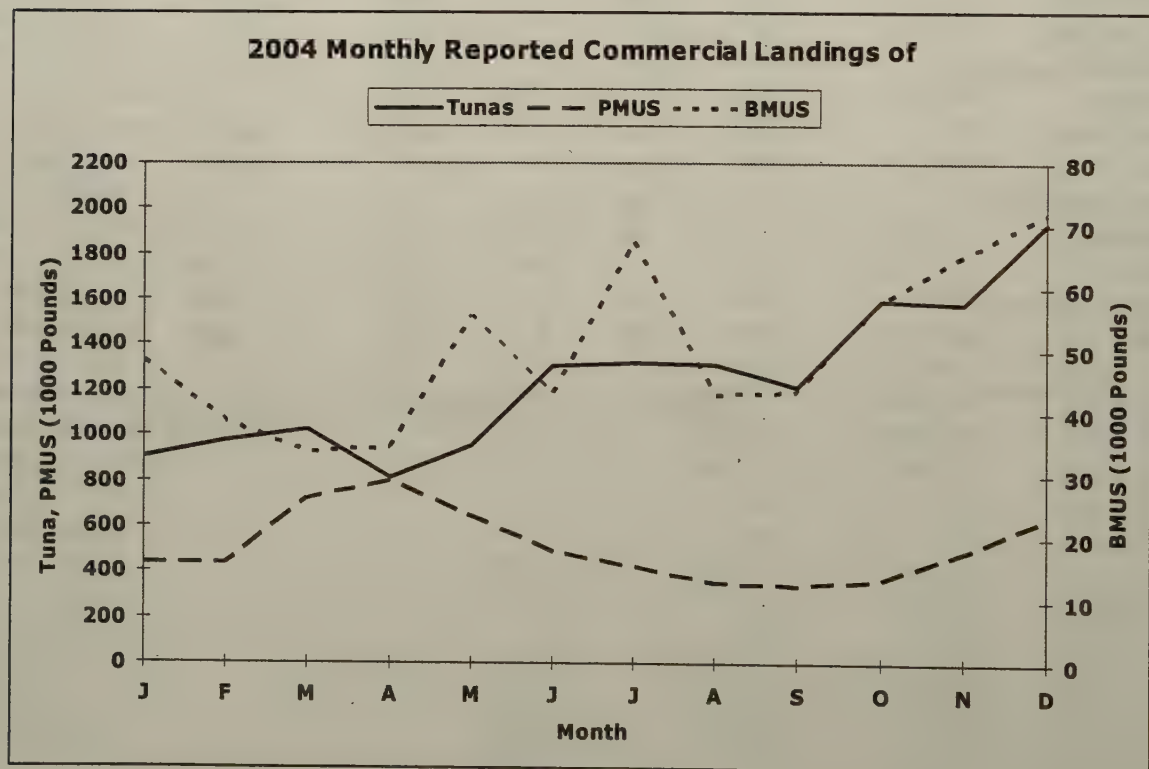


Figure D-1-2

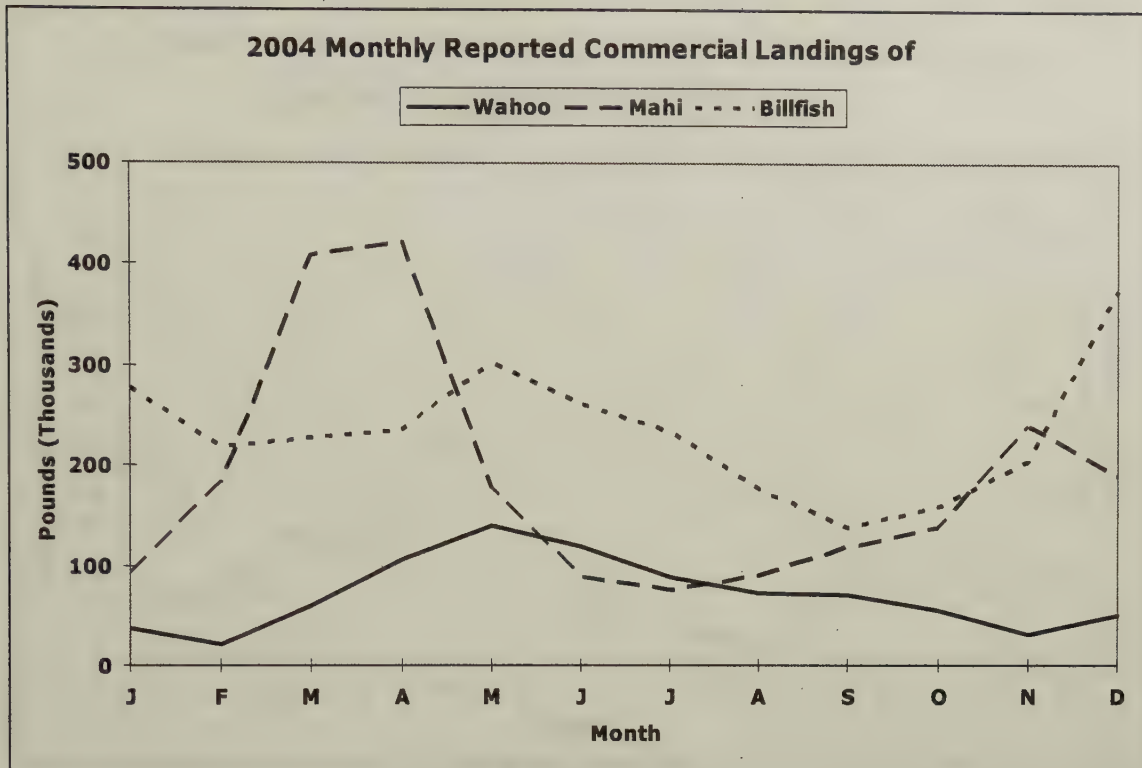


Figure D-1-3

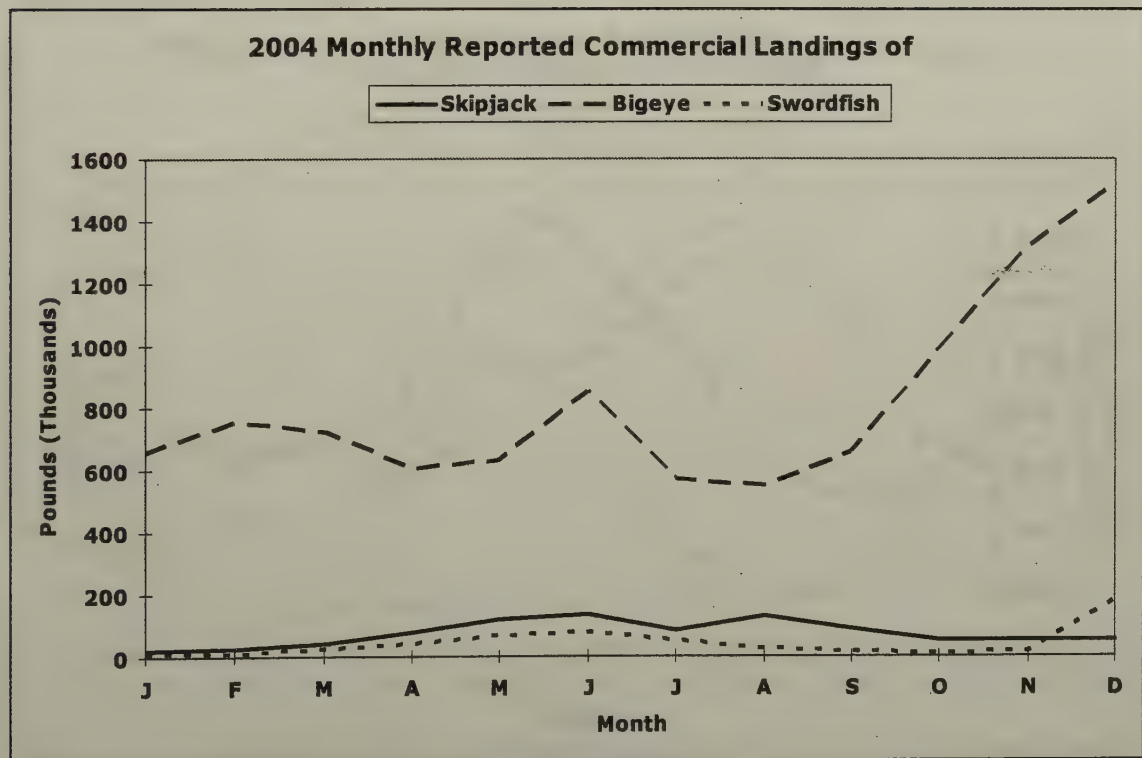


Figure D-1-4

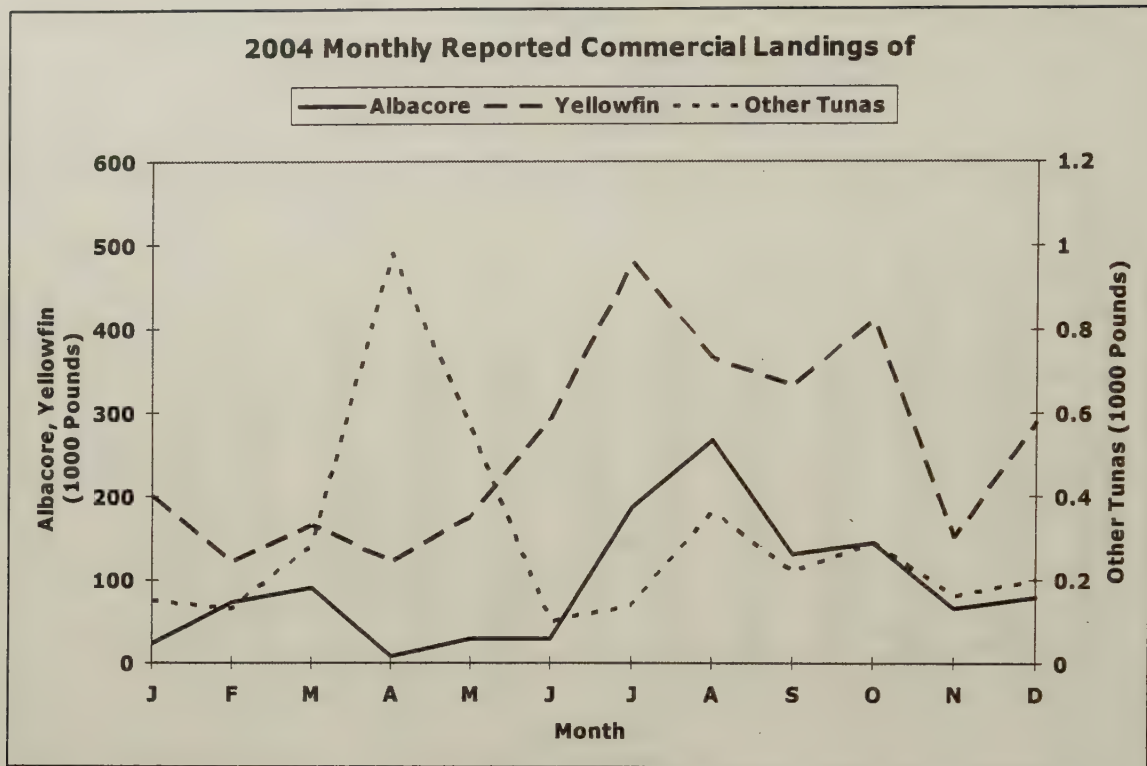


Figure D-1-5

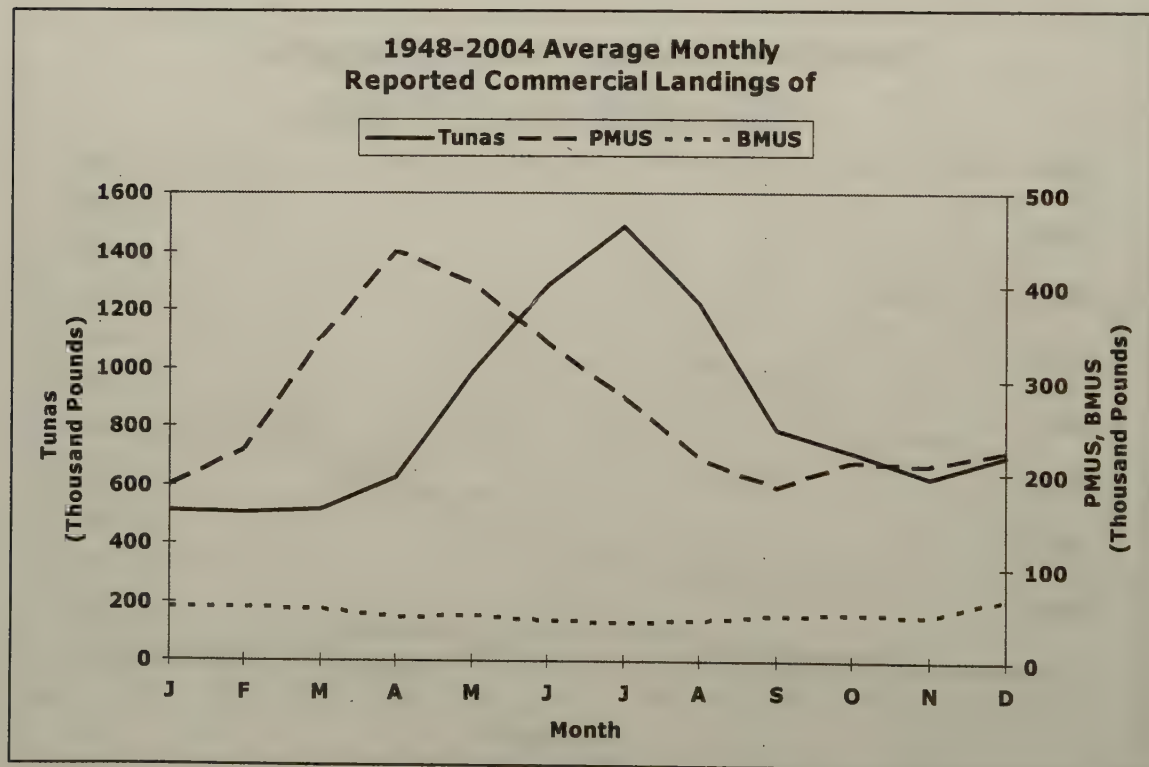


Figure D-2-1

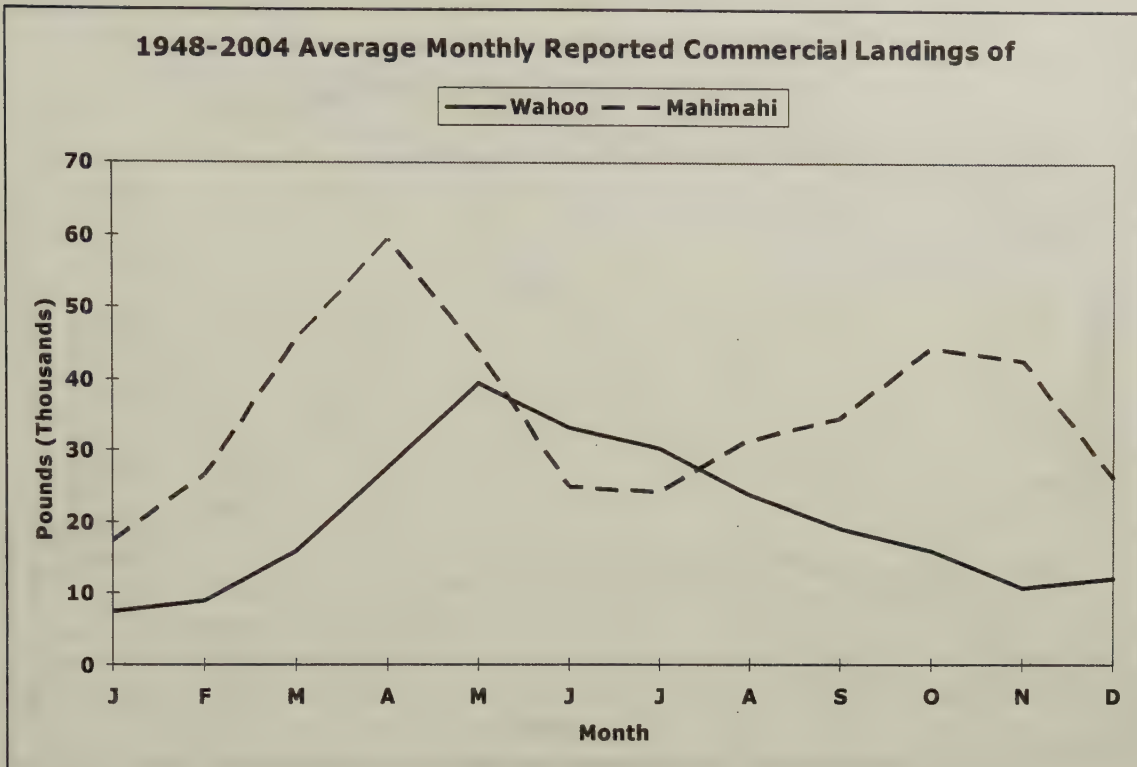


Figure D-2-2

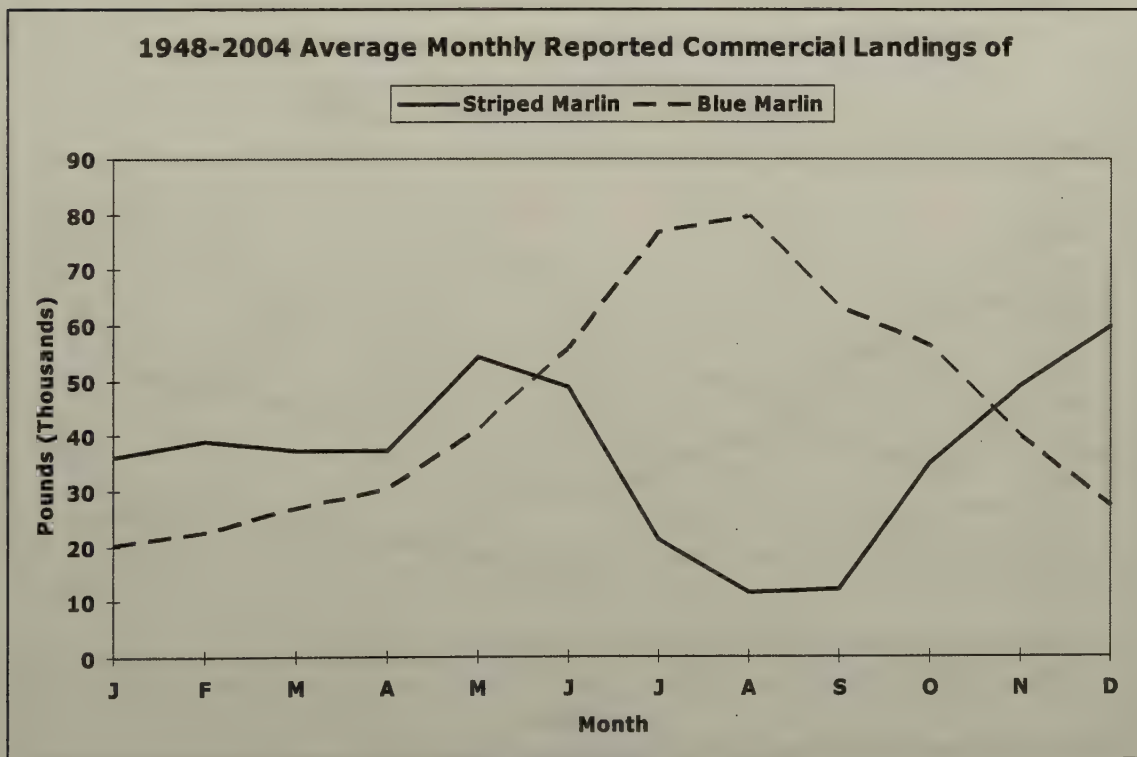


Figure D-2-3

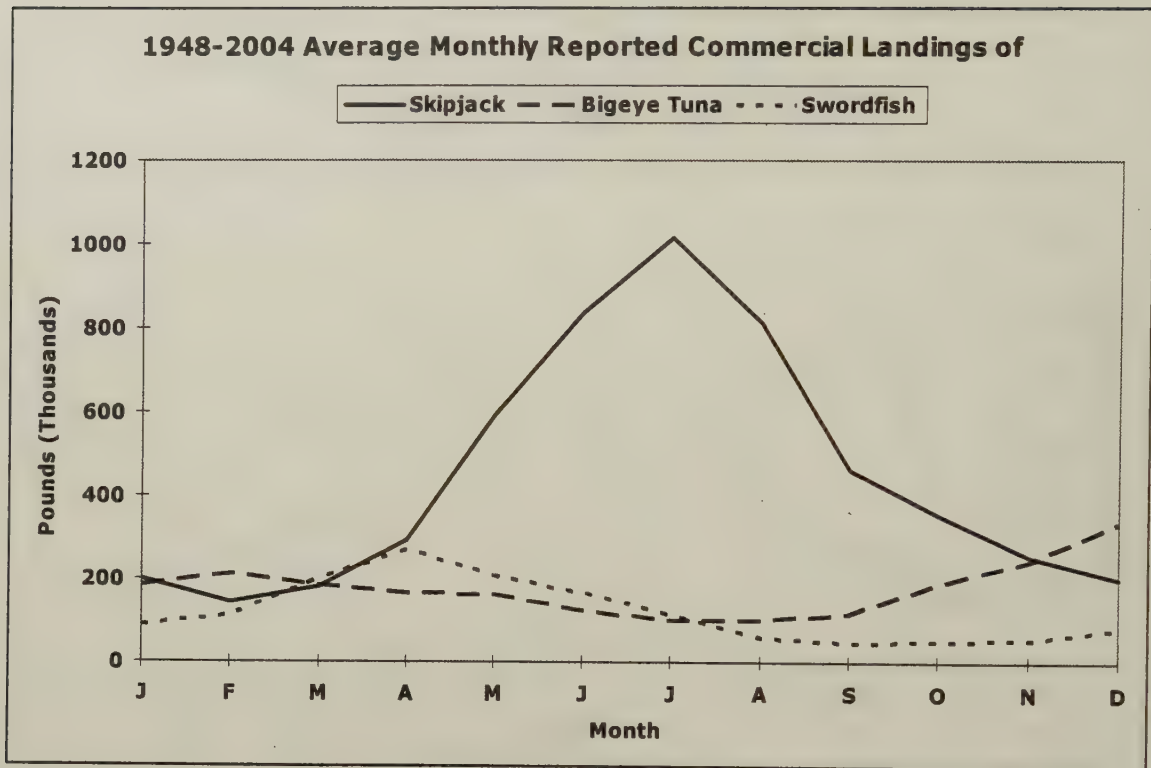


Figure D-2-4

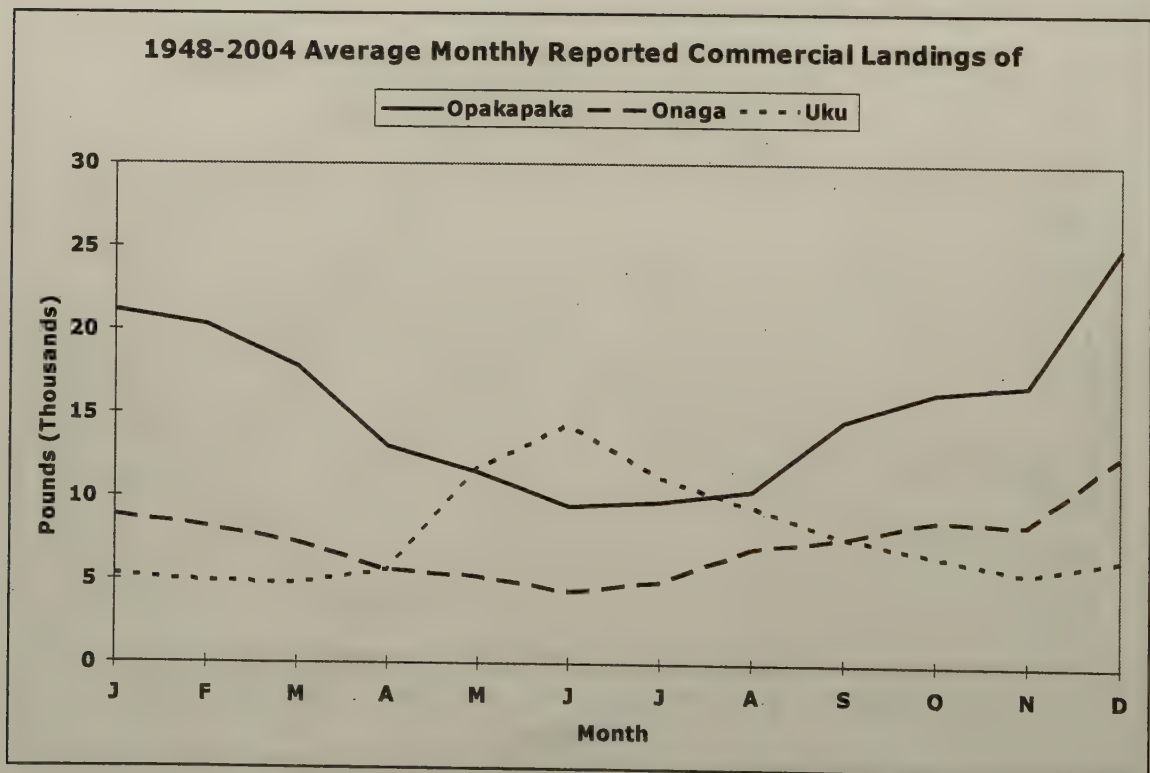


Figure D-2-5

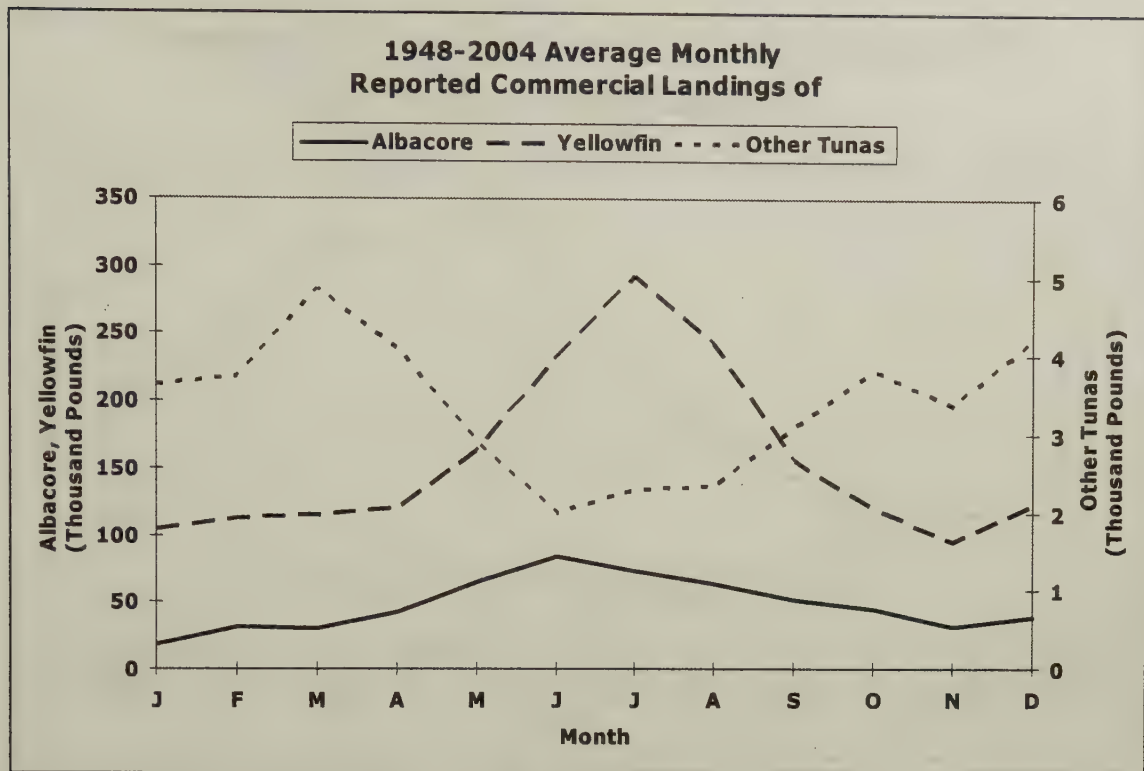


Figure D-2-6

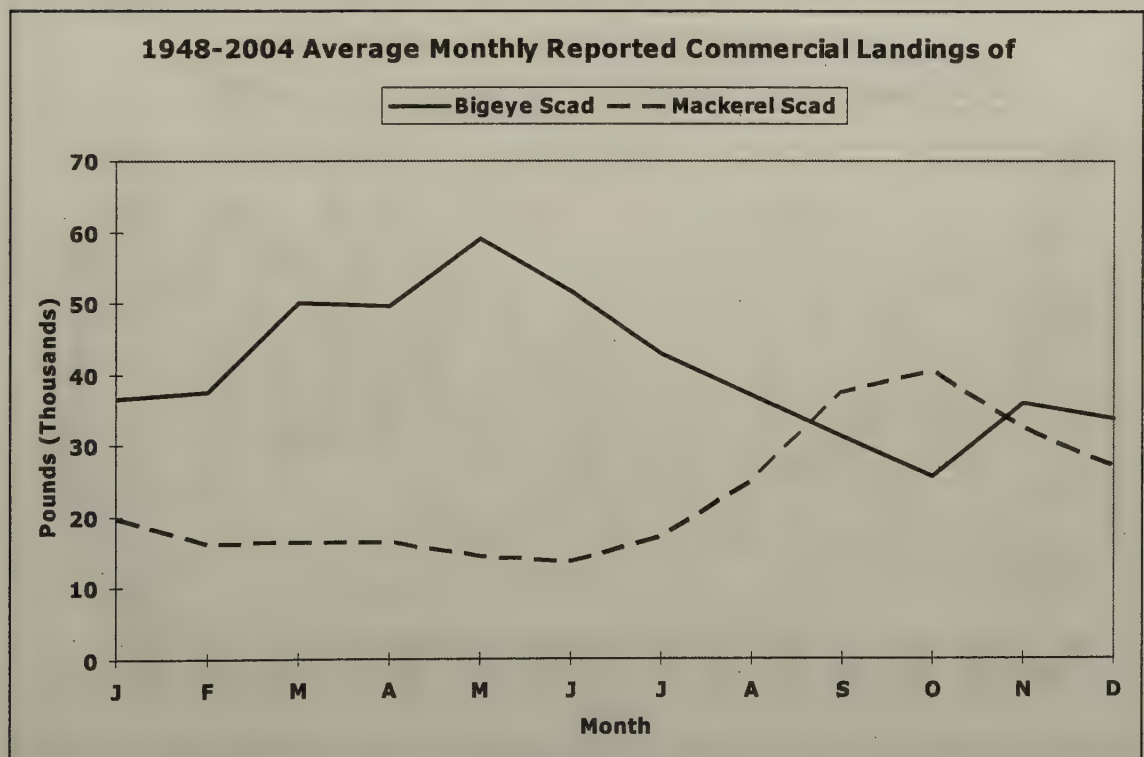


Figure D-2-7

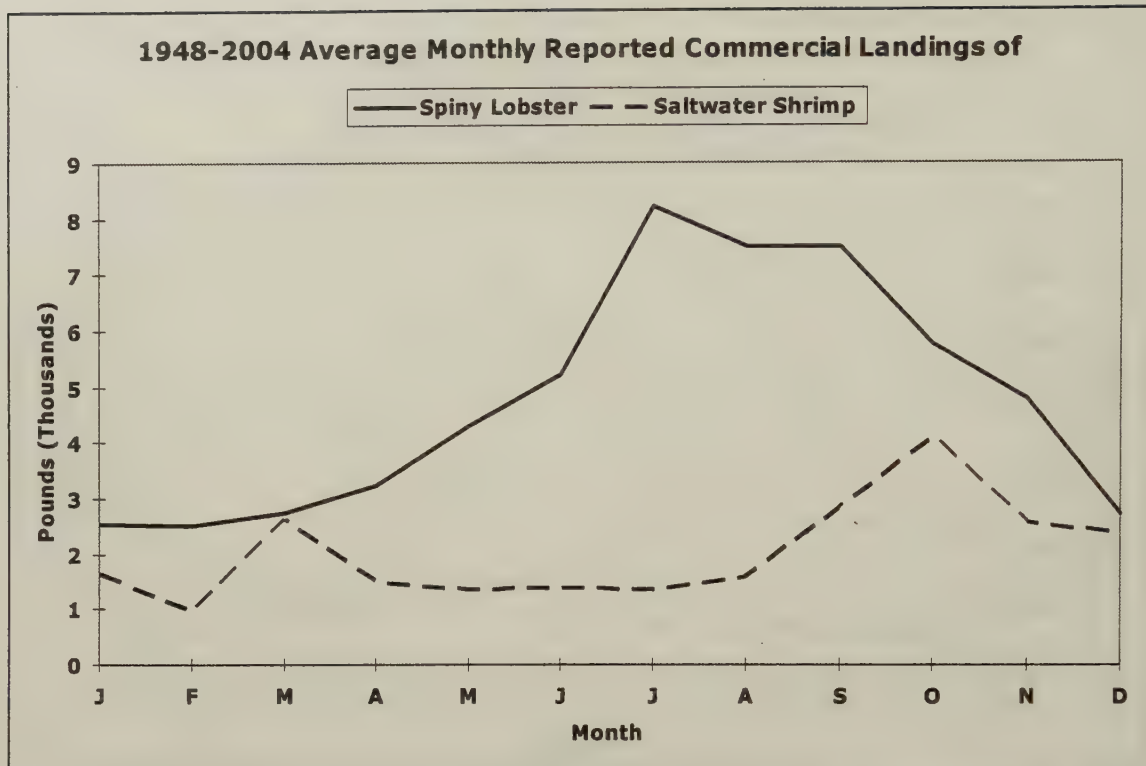


Figure D-2-8

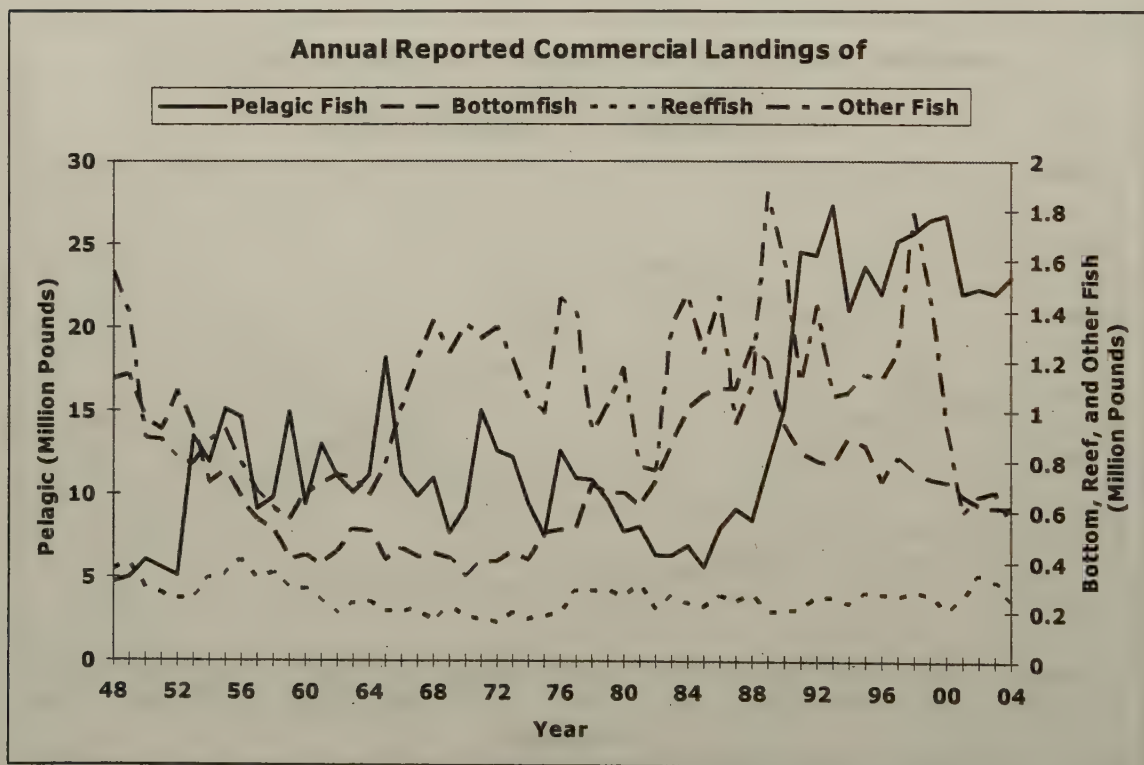


Figure D-3-1

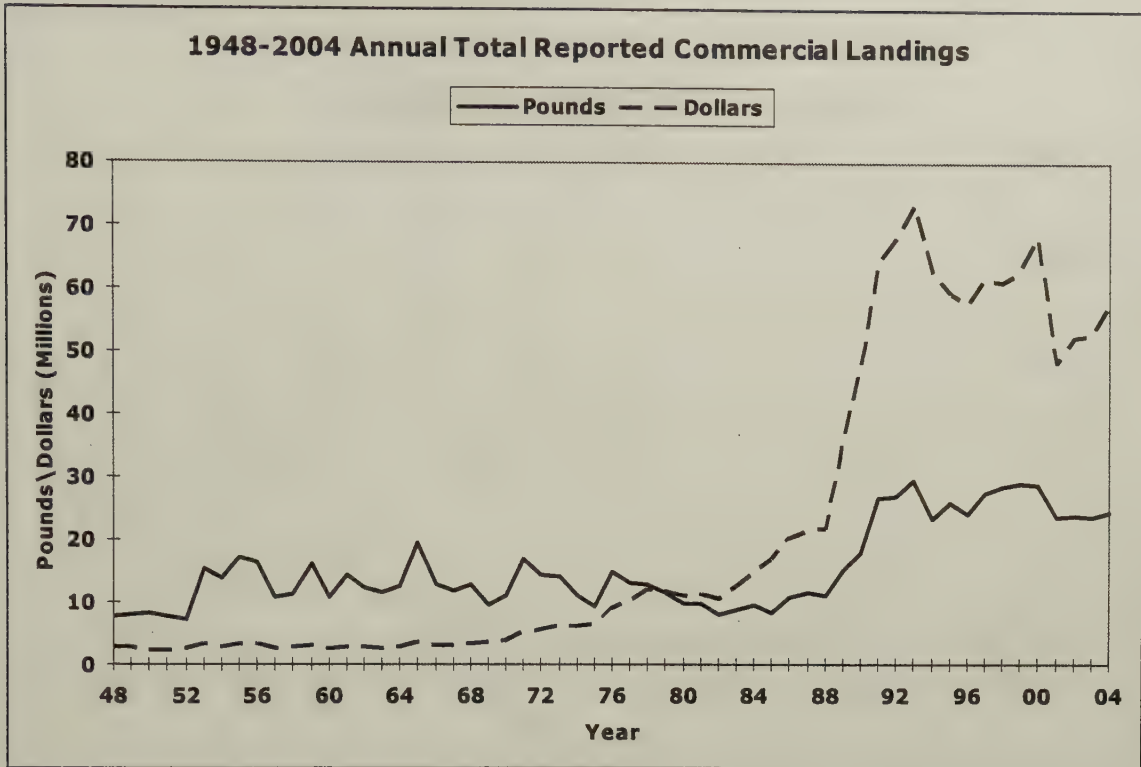


Figure D-3-2

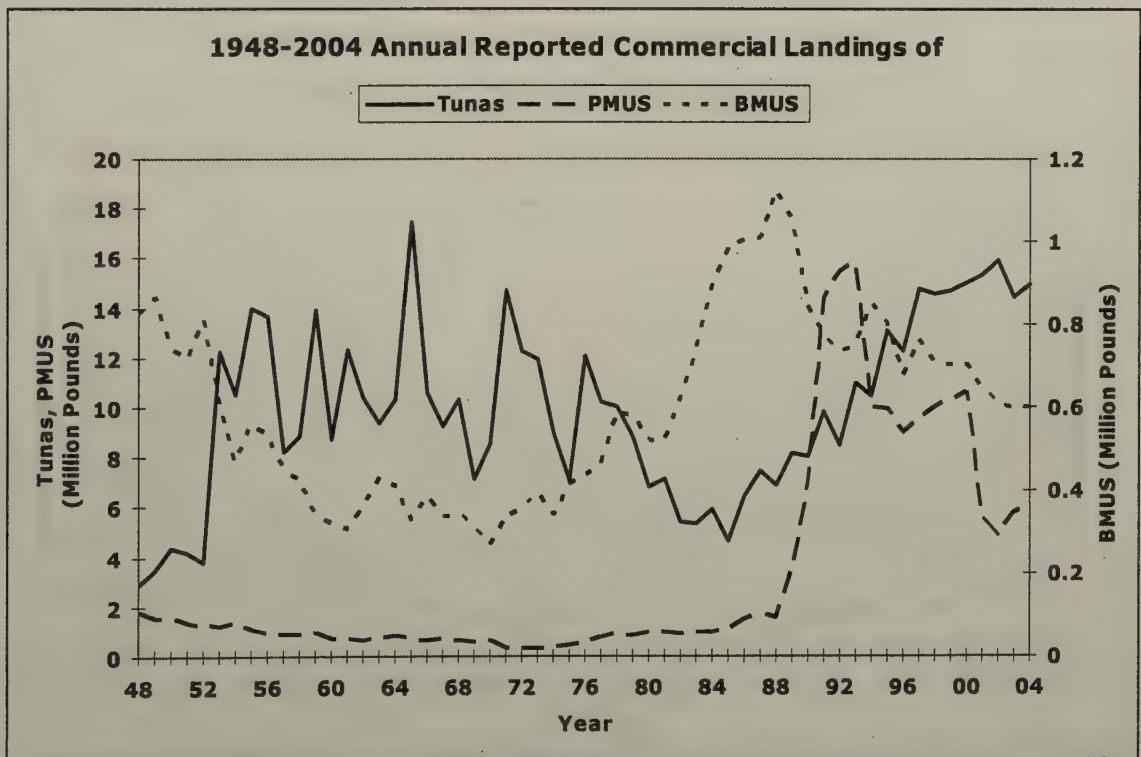


Figure D-3-3

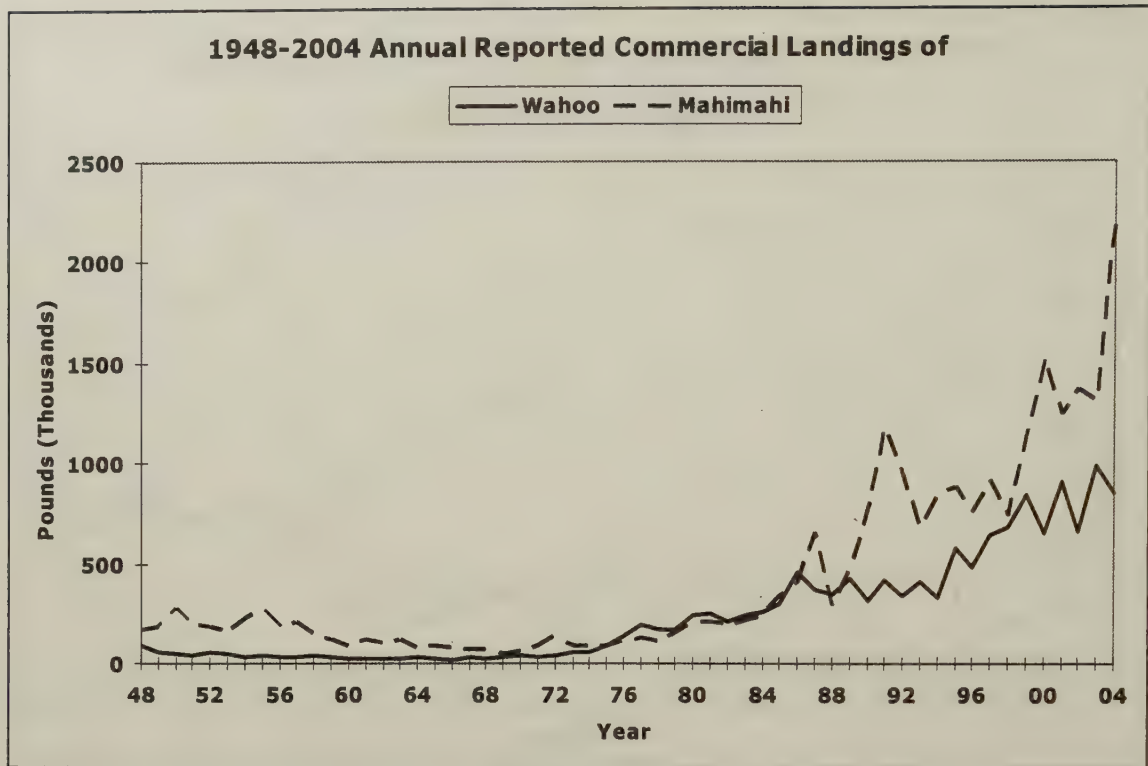


Figure D-3-4

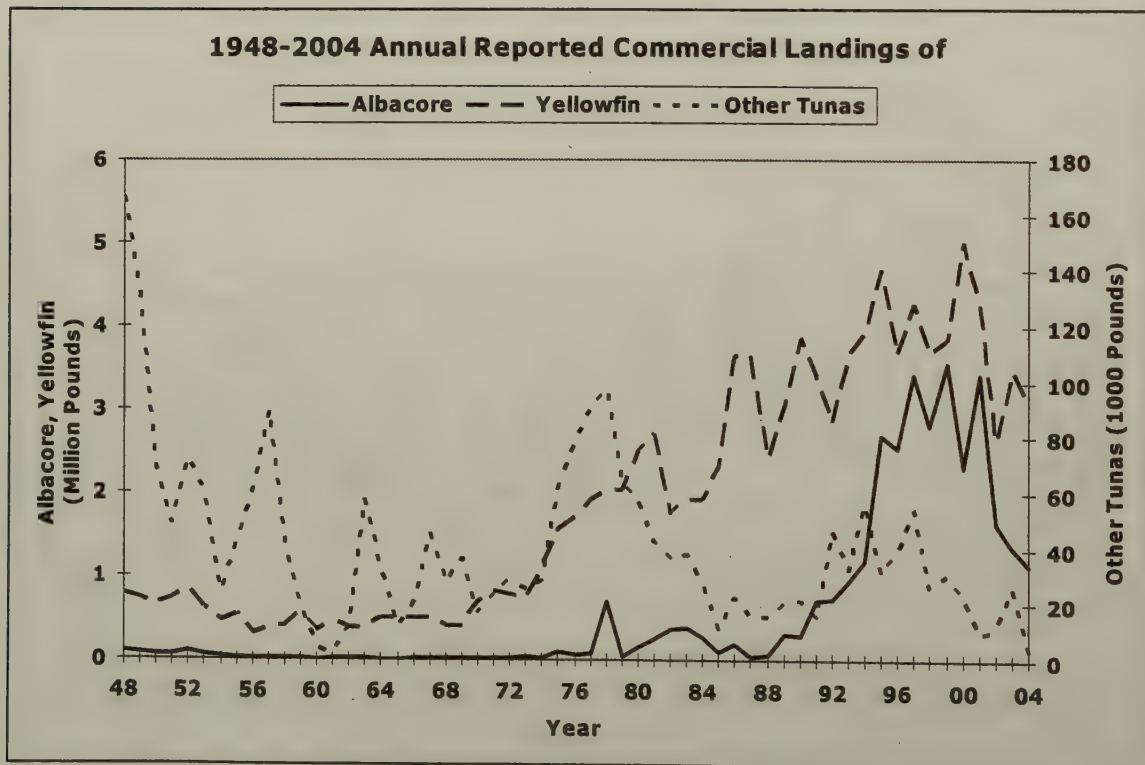


Figure D-3-5

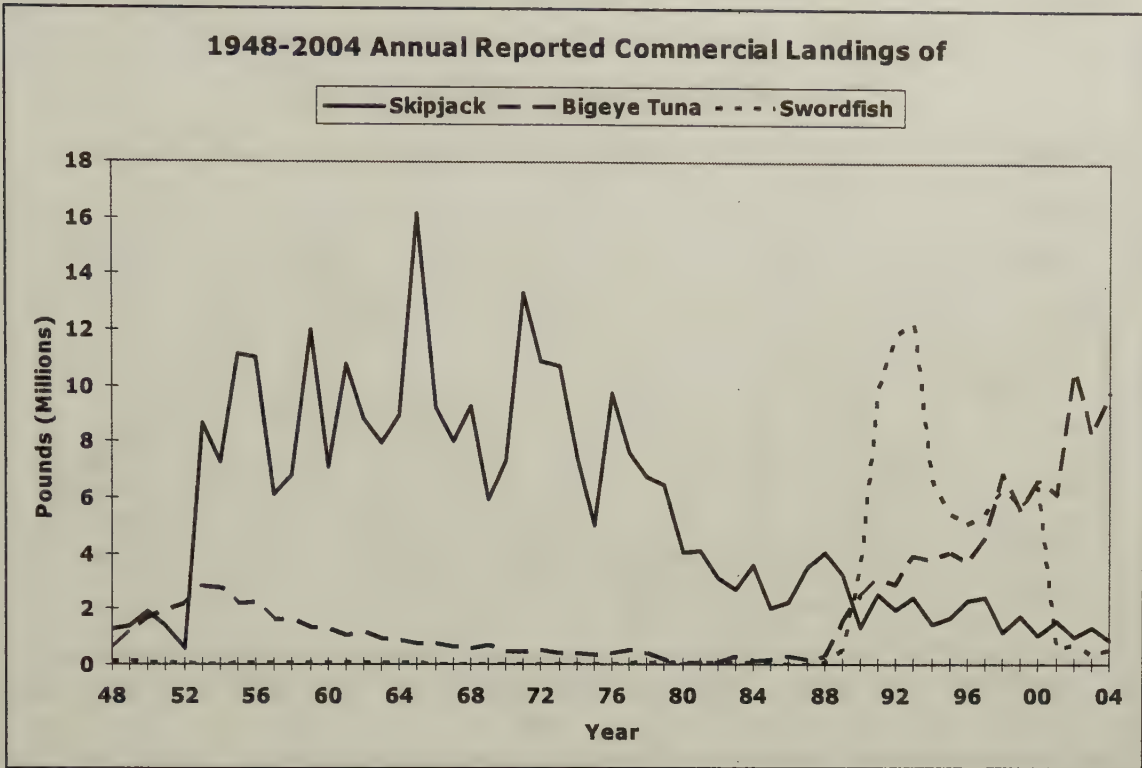


Figure D-3-6

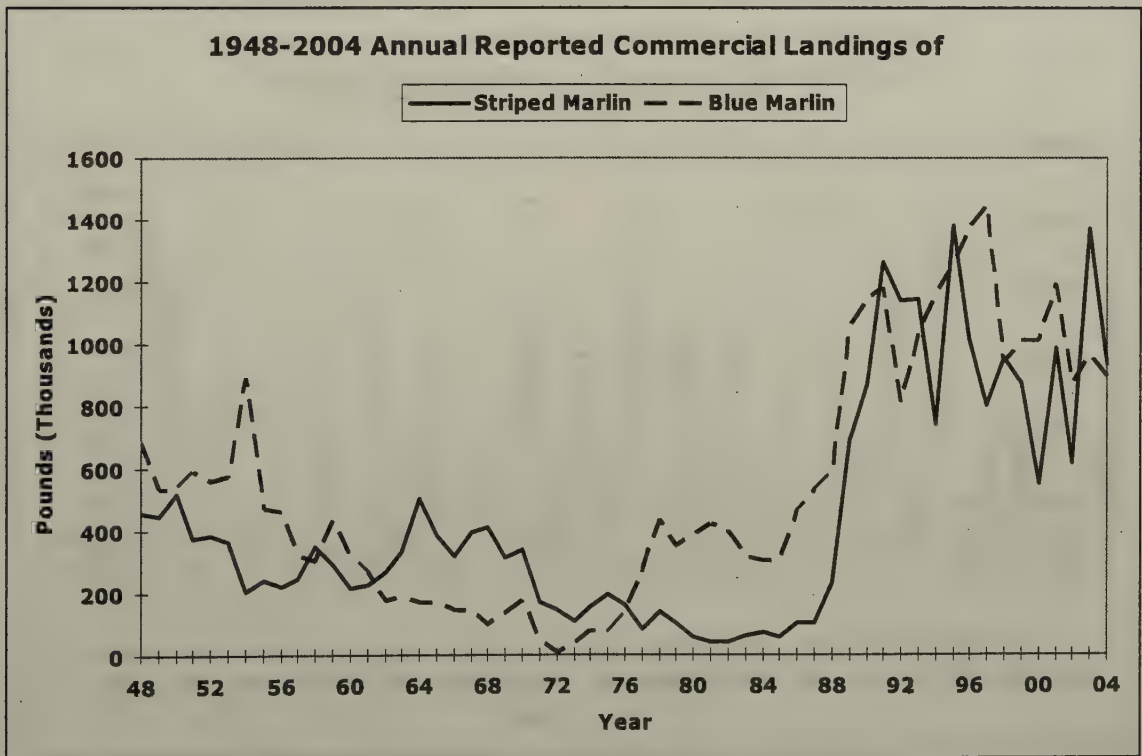


Figure D-3-7

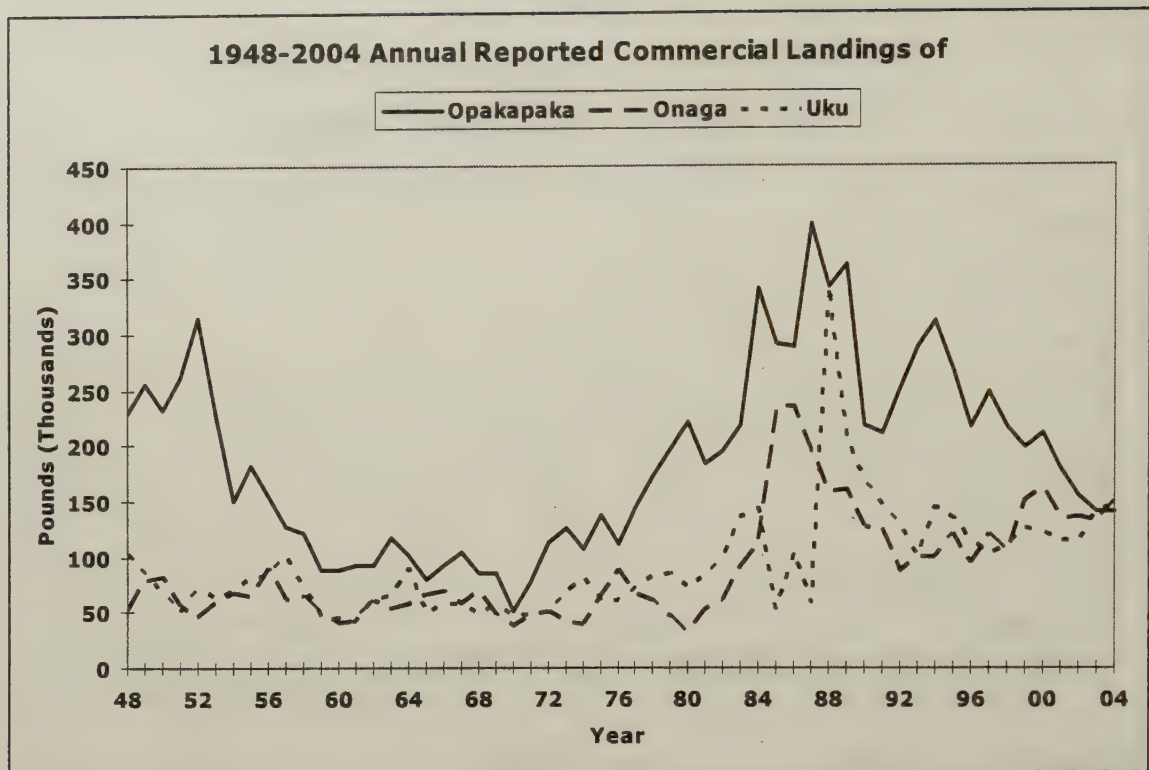


Figure D-3-8

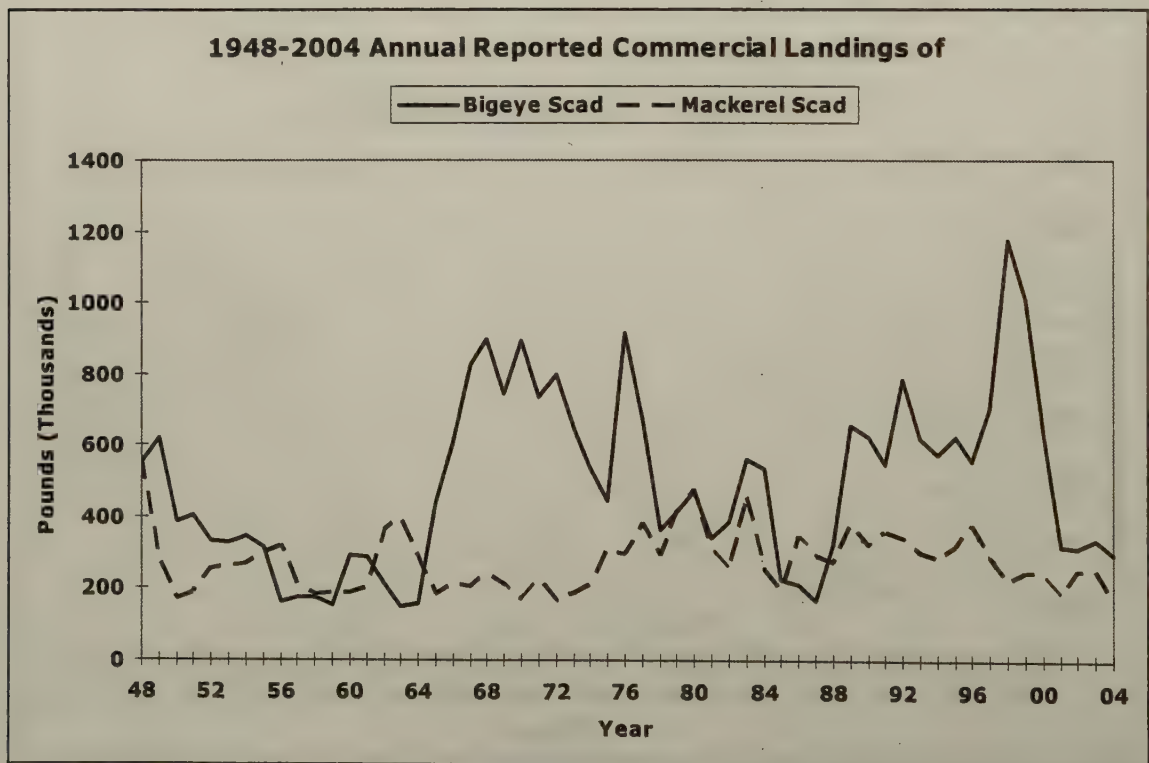


Figure D-3-9

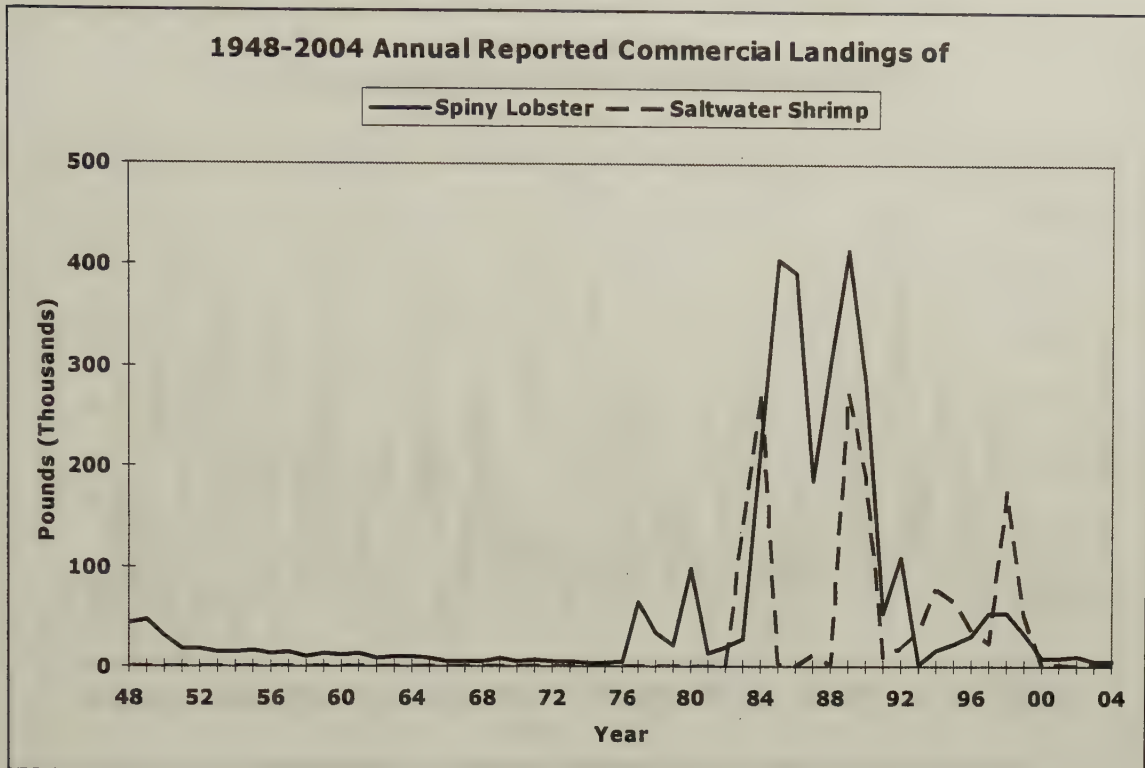


Figure D-3-10

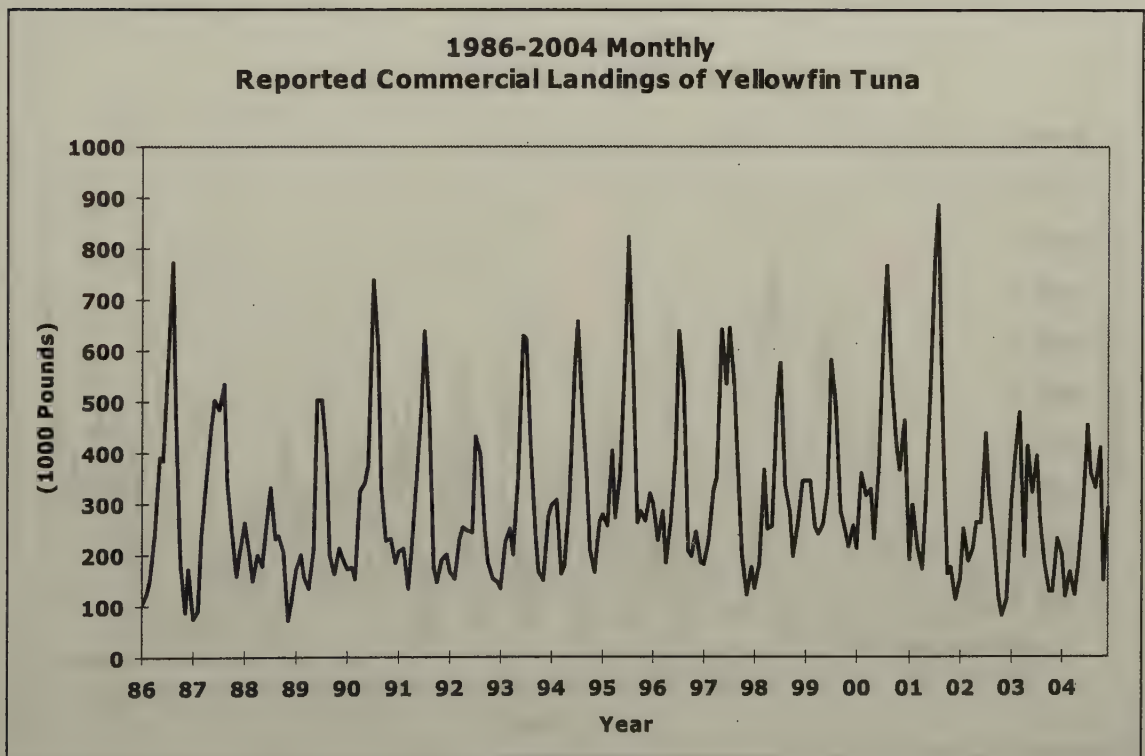


Figure D-4-1

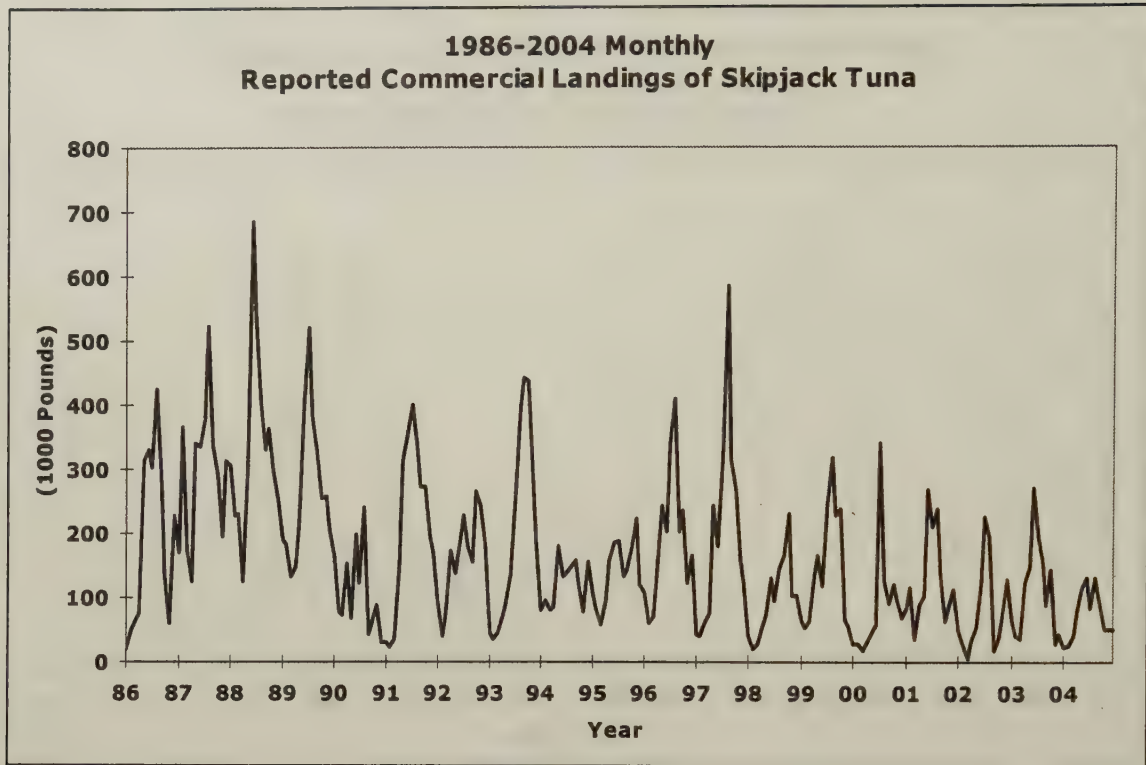


Figure D-4-2

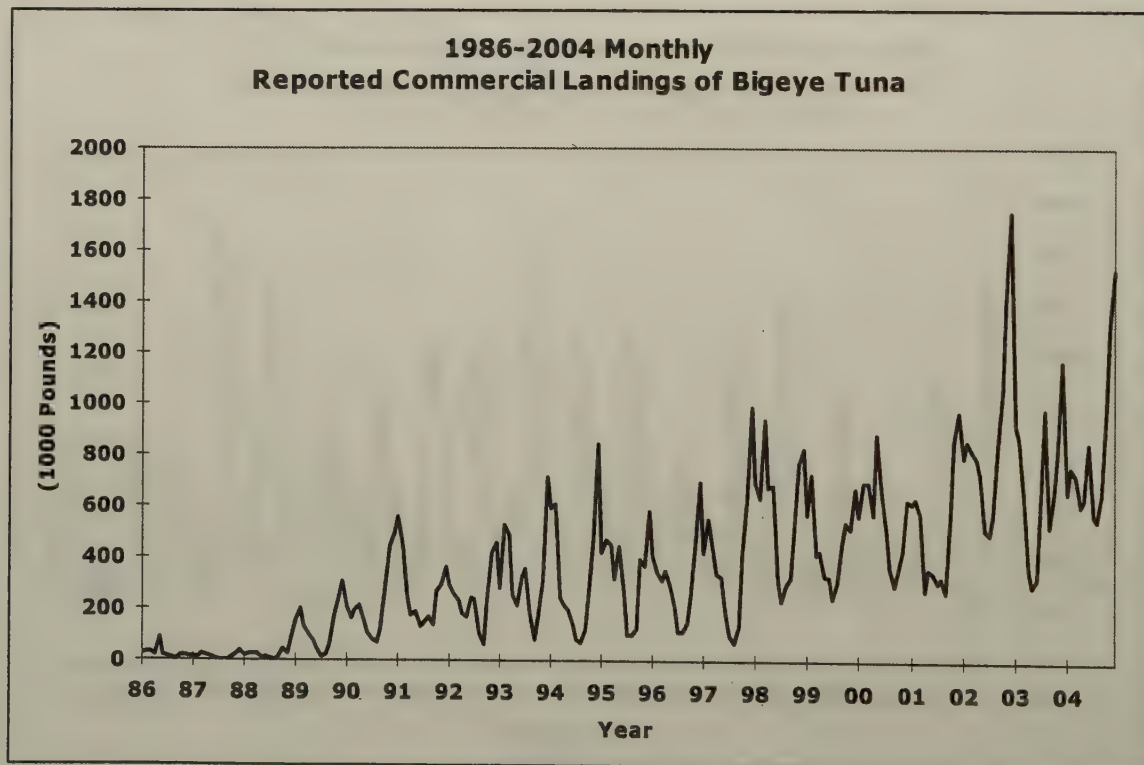


Figure D-4-3

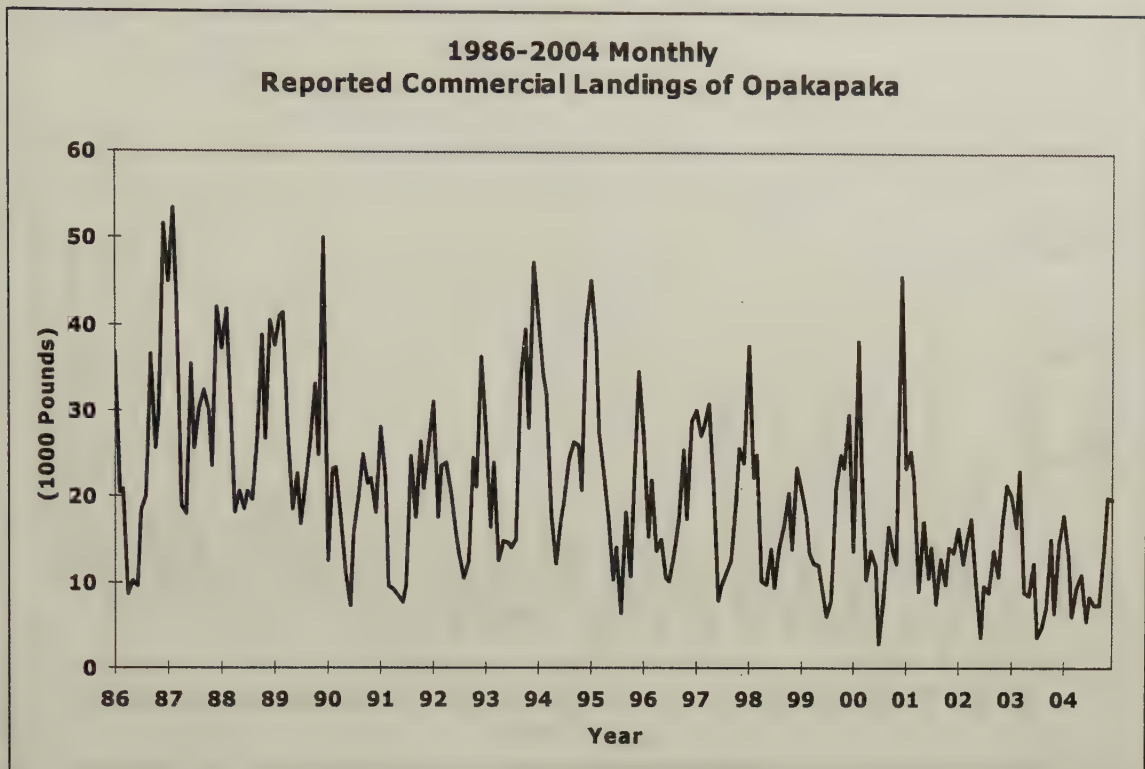


Figure D-4-4

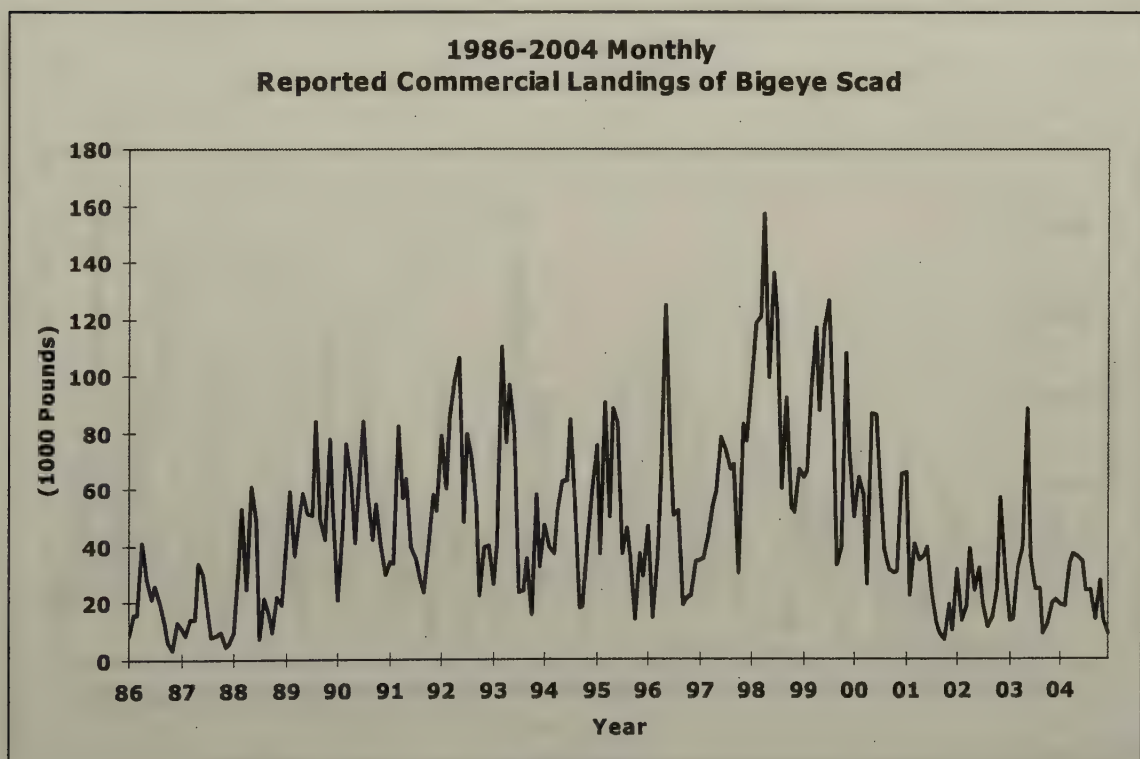


Figure D-4-5

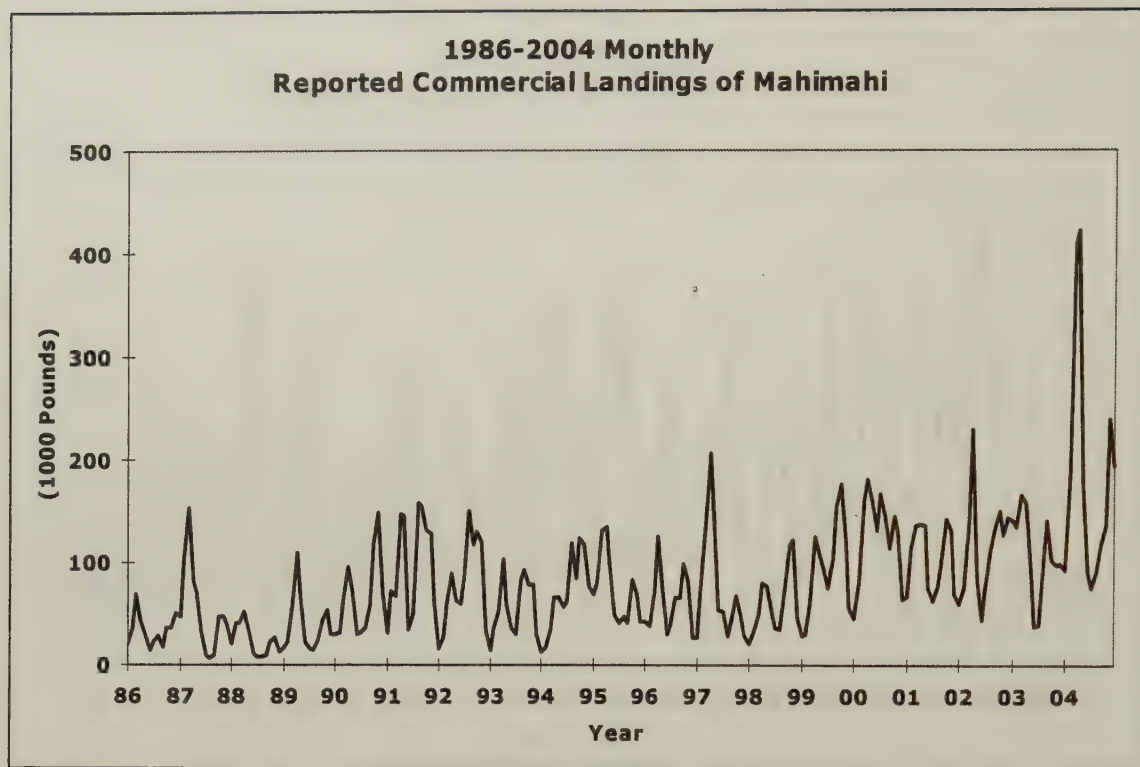


Figure D-4-6

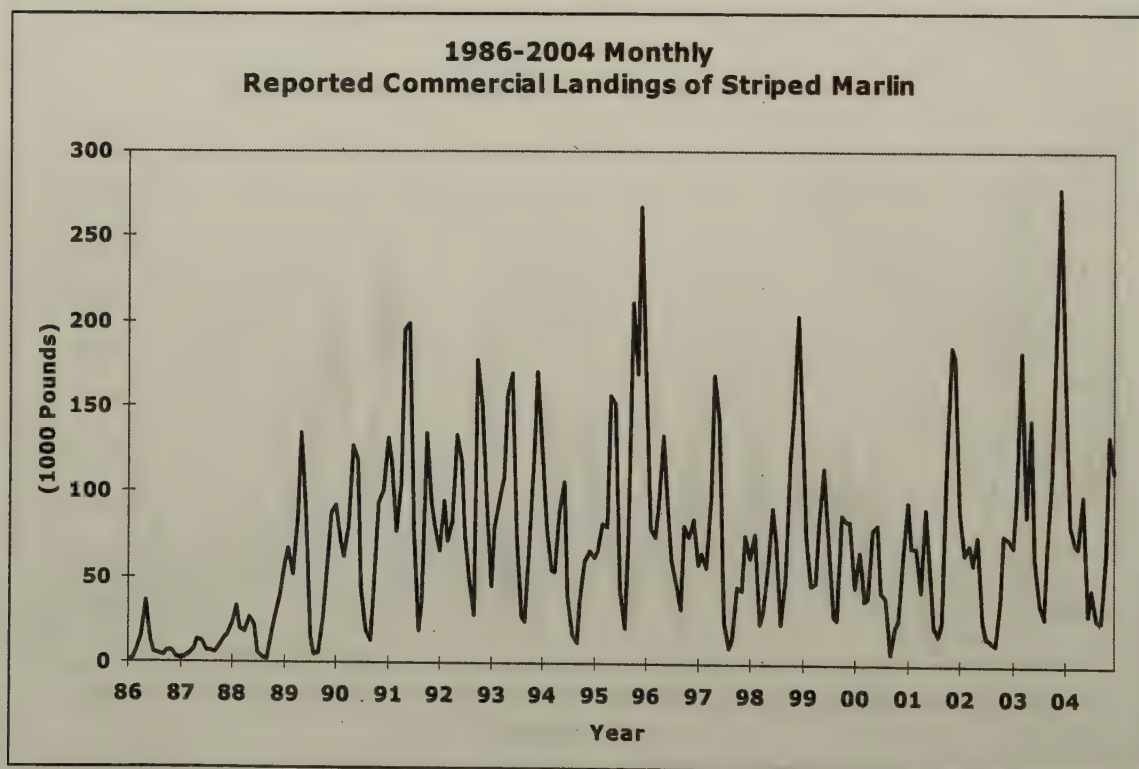


Figure D-4-7

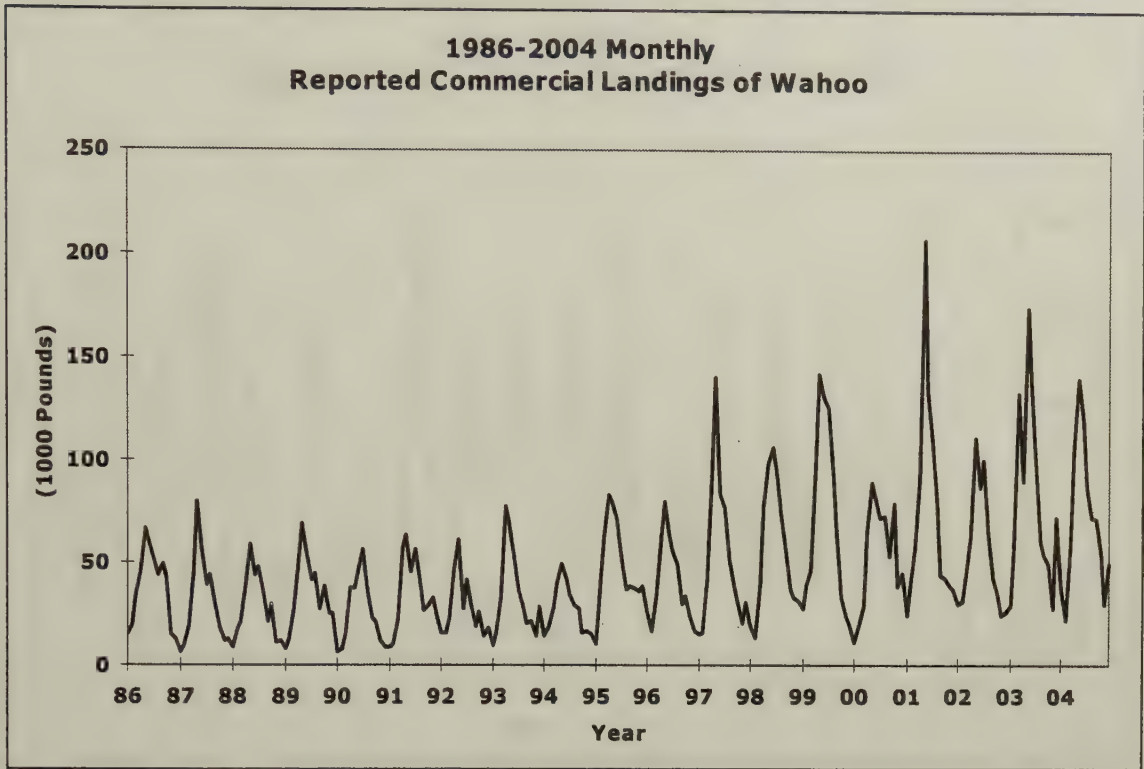


Figure D-4-8

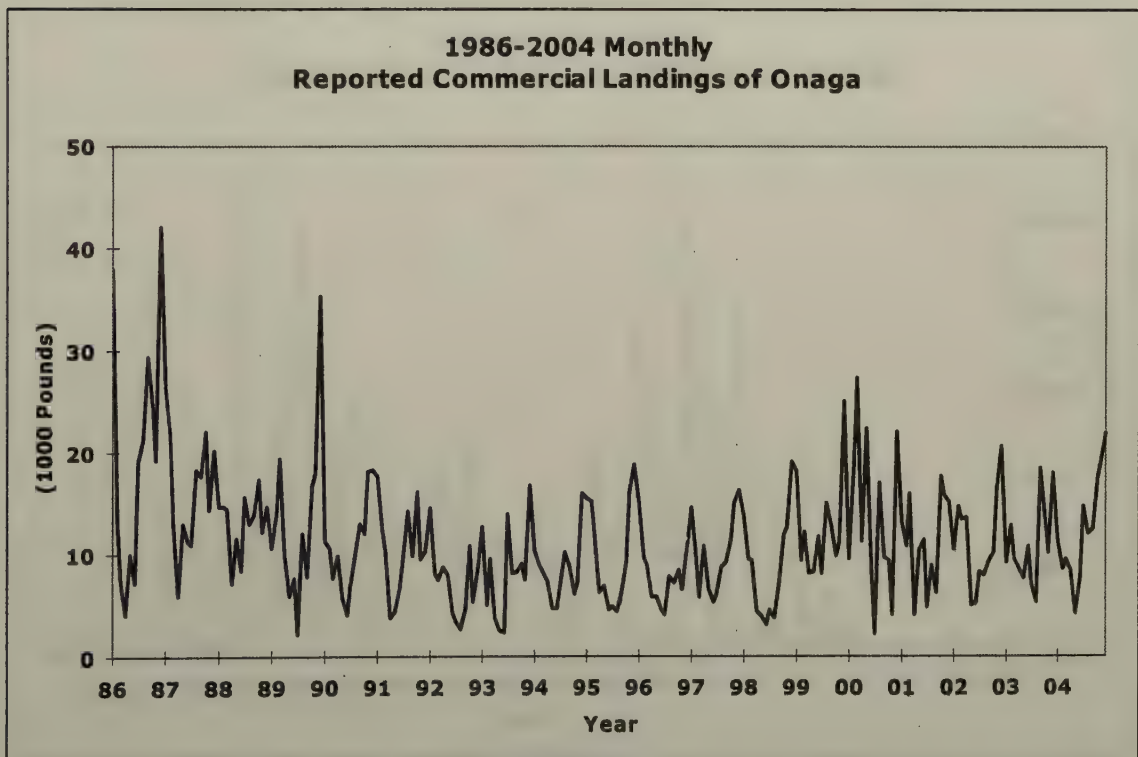


Figure D-4-9

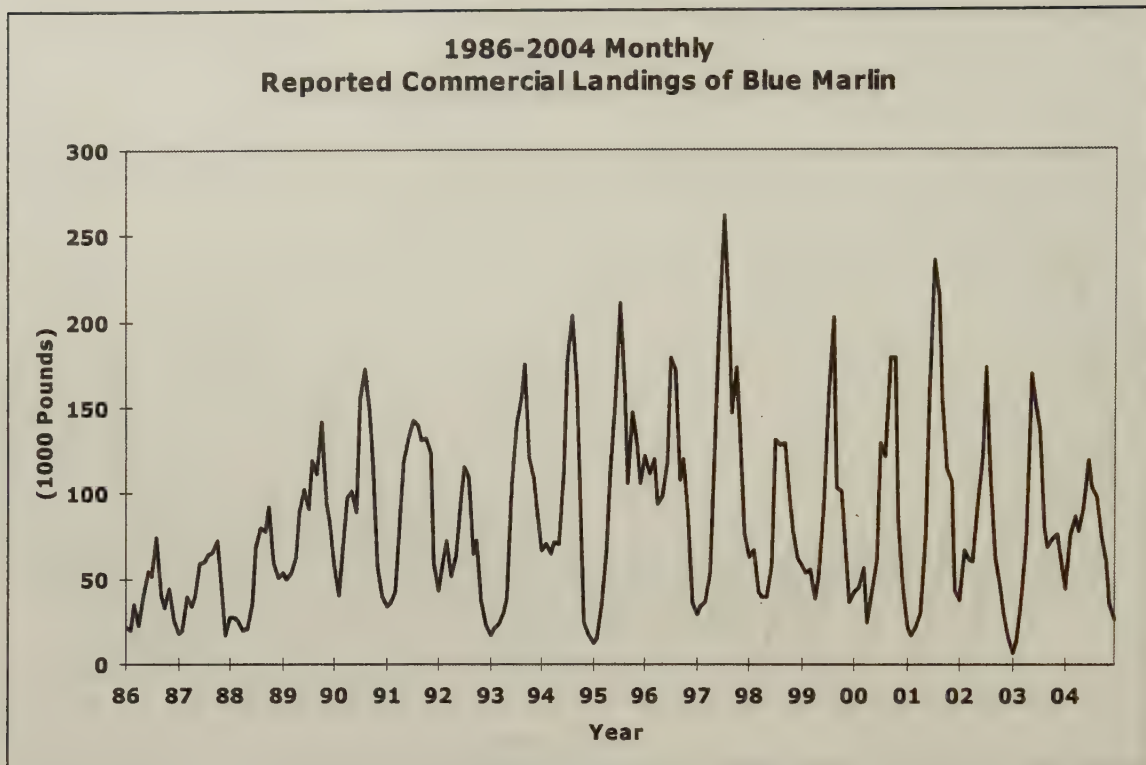


Figure D-4-10

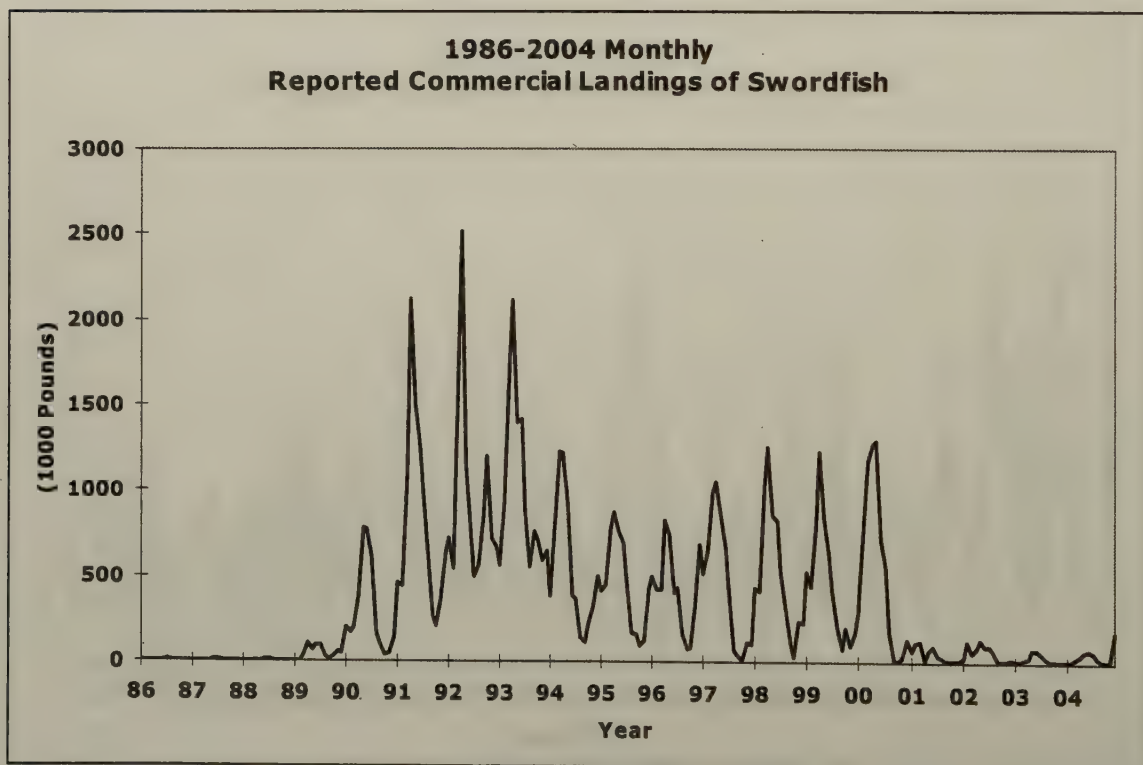


Figure D-4-11

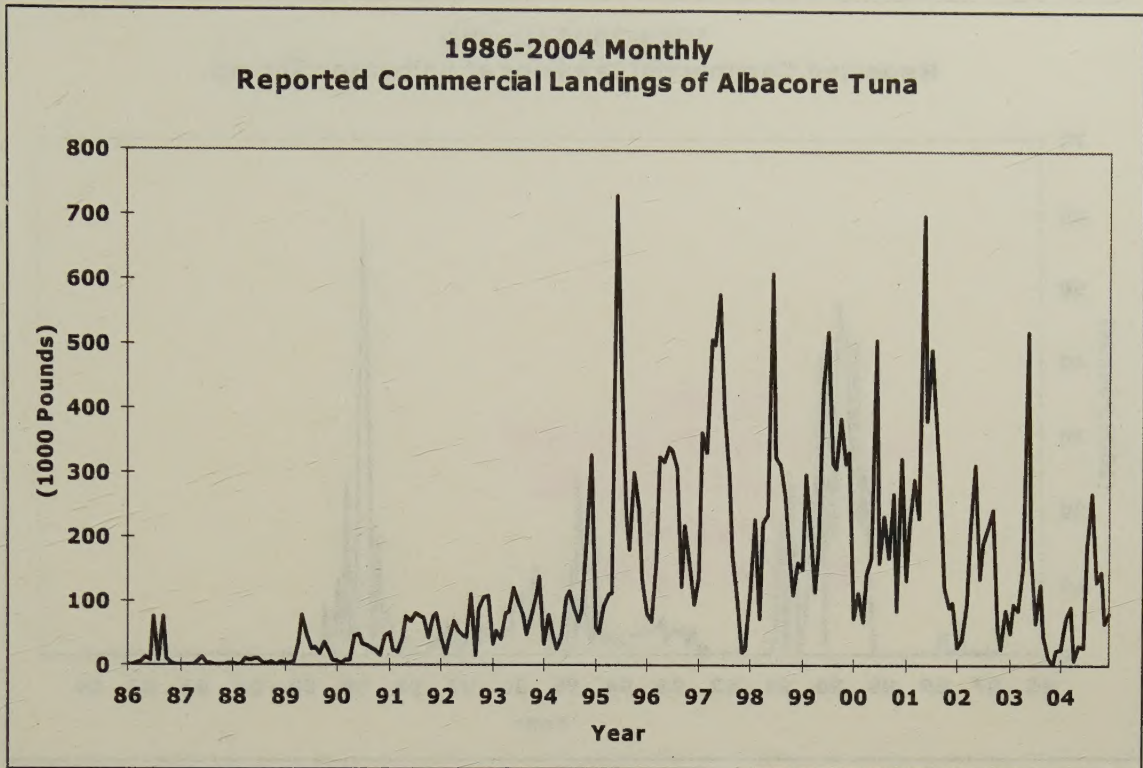


Figure D-4-12

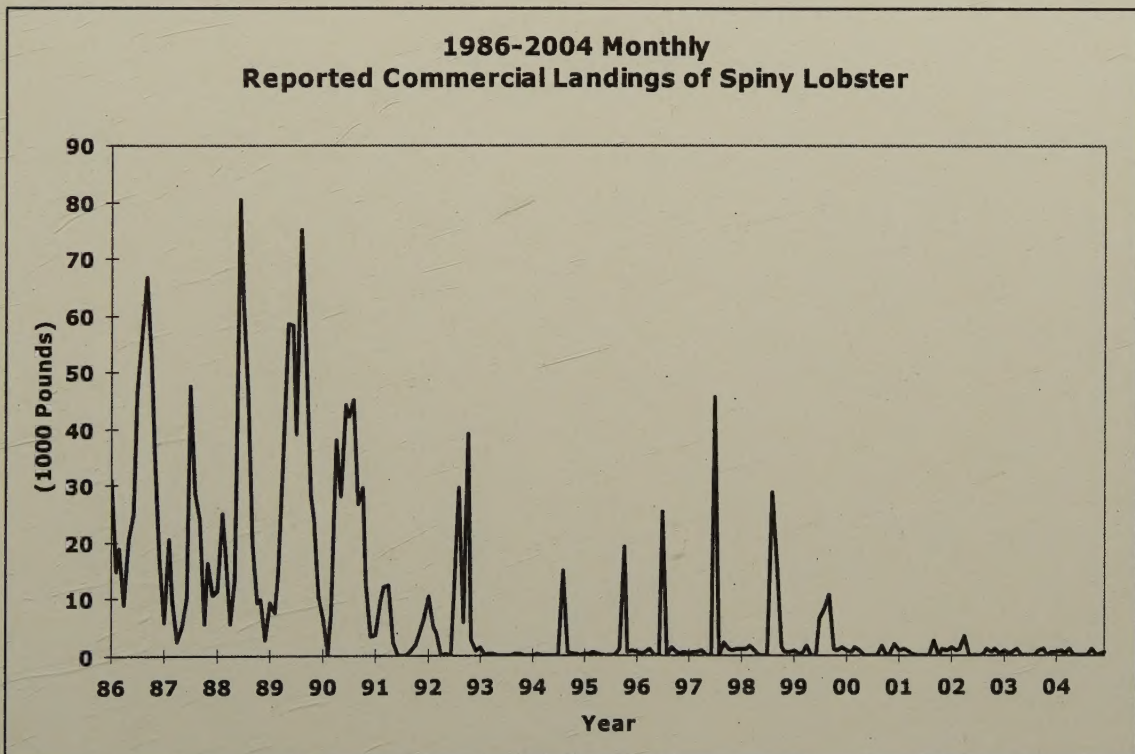


Figure D-4-13

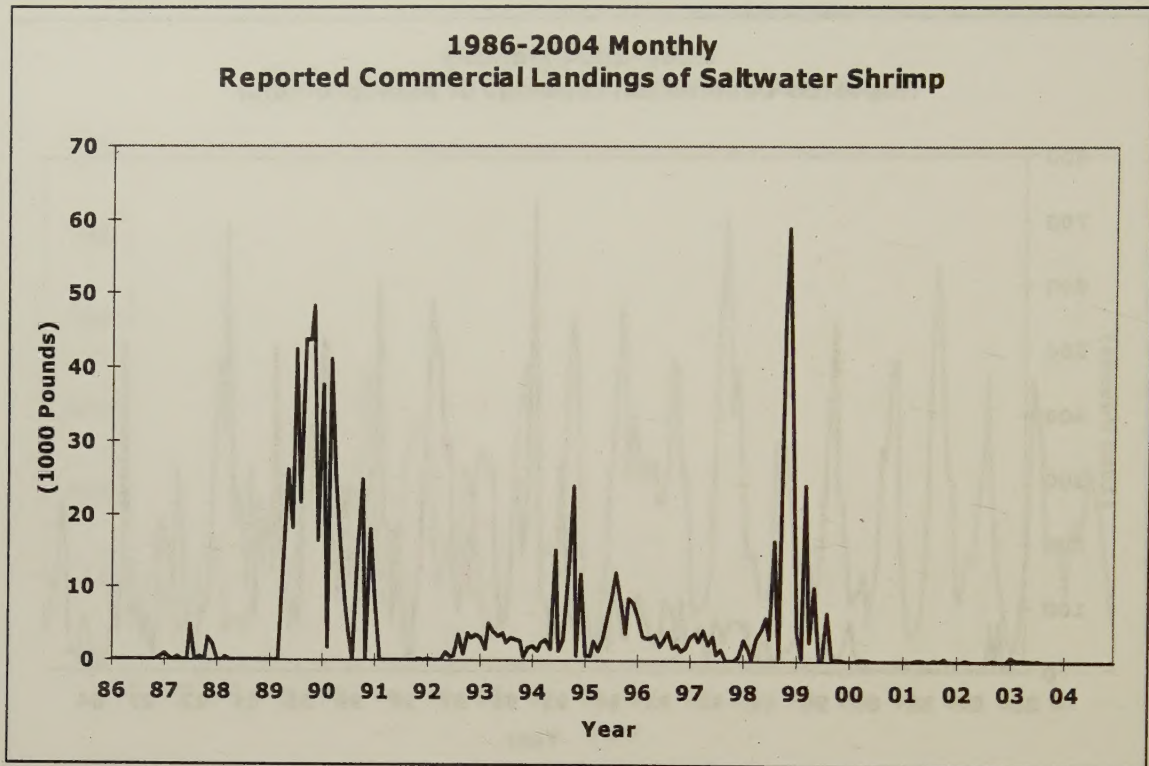


Figure D-4-14

LIBRARY

Pacific Islands Fisheries Science Center

National Marine Fisheries Service

2570 Dole St.

Honolulu, HI 96822-2396

